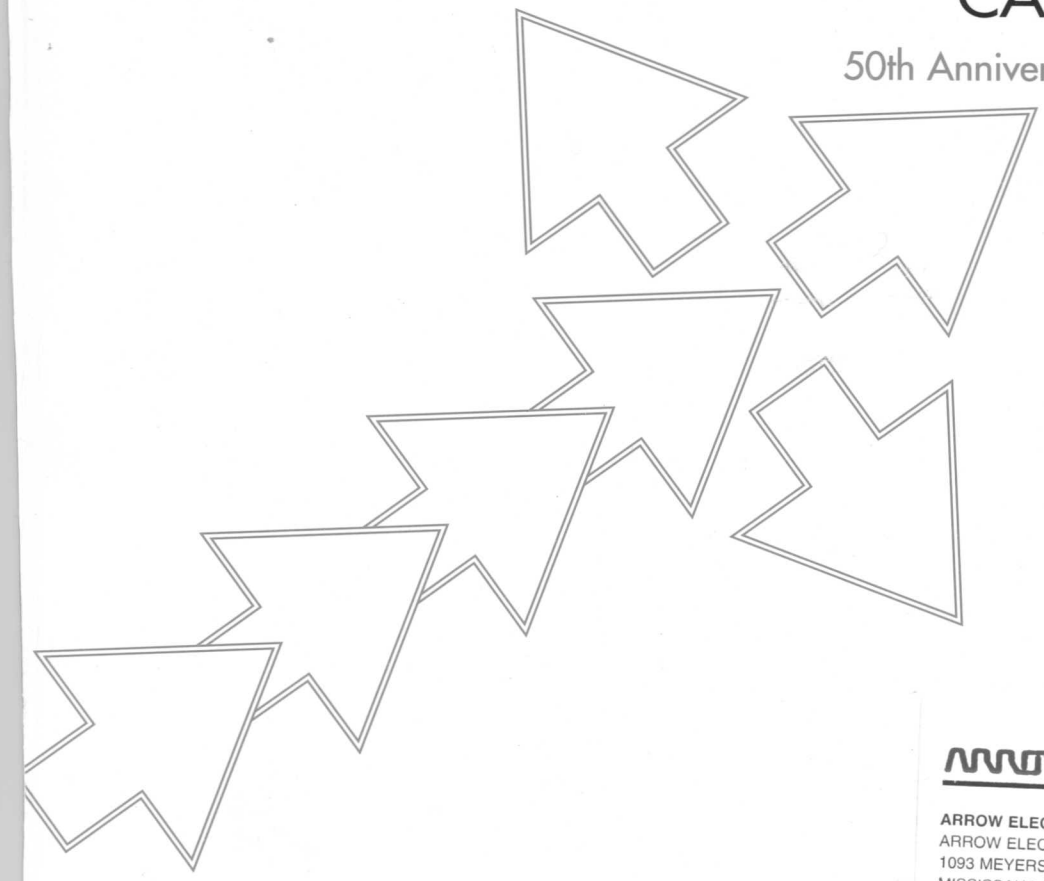
SHORT FORM CATALOG

50th Anniversary Edition



ARROW ELECTRONICS, INC.
ARROW ELECTRONICS CANADA LTD.
1093 MEYERSIDE DRIVE
MISSISSAUGA, ONTARIO L5T 1M4
905-670-7769 800-387-3962 FAX: 905-670-7781

International
IOR Rectifier

INTERNATIONAL RECTIFIER

50 ANNIVERSARY 1947-1997

Product Digest

International Rectifier's Shortform Catalog, 50th Anniversary Edition

March 1997

Technical Support

North America

Product Information Center *7am-5pm PST*

Phone: (310) 252-7105

Fax: (310) 252-7903

For assistance with

- Product Selection
- Specifications
- Part Numbers
- Case Styles
- Cross References
- Materials
- Applications

Europe

Technical Helpline *8:30 am - 5:15 pm GMT*

Phone: (++44) 1833 733309

Fax: (++44) 1833 733410

Call the Technical Helpline for:

- Product Selection
- Applications Support
- Power Circuit Design
- Sample Requests.

All other regions, call your local offices listed in the back of this book.

International
IOR Rectifier

Fax-On-Demand

Product literature 24 hours a day

North America (310) 252-7100
Europe 01883 733420 (from inside the UK)
++44 1883 733420 (from outside the UK)
Asia **Pre-registration required**

Contact your local sales office to obtain a personal access number for Fax-on-Demand service in Asia.

To use Fax-On-Demand, call from a touch-tone phone and follow the voice menu instructions to order a directory of documents. The directory of documents will provide you with document numbers for over 1300 documents including data sheets, application notes and selection guides. You can call the fax-on-demand system at any time and request up to 3 documents per call.

Literature is available for all other regions through our local offices.

International
IOR Rectifier

Field Support

International IOR Rectifier

Service Area	Name	Office		
Brazil	Paulo Zappi	Zappi-Equipment Elect. Ltd	55 11 63-6034	Phone
			55 11 853-9455	FAX
US - Central	Steve Cox	International Rectifier (IL)	(847) 934-0020	Phone
			(847) 934-0452	FAX
US - Northeast	Steve Colino	International Rectifier (PA)	(610) 358-5153	Phone
			(610) 358-5172	FAX
US - Southeast & TX	Ray King	International Rectifier (NC)	(919) 458-4152	Phone
			(919) 458-6342	FAX
US - West	Sandy Chotiner	International Rectifier (CA)	(310) 252-7177	Phone
			(310) 252-7727	FAX
China	Junan Chen	Xian Power Electronics Research Inst.	86 29 525 4123	Phone
	Ming Li		86 29 526 1691	FAX
China	Wenming Qian	International Rectifier	86 21 566 21235	Phone
	Jing Qiu		86 21 569 04706	FAX
India			91 80 334 4197	Phone
			91 80 332 7555	FAX
Japan	Haruji Nakajima	IR Far East (Tokyo)	81 33 983 0641	Phone
			81 33 983 0642	FAX
Korea	Brian Taylor	c/o International Rectifier (UK)	441 883 732020	Phone
			441 883 733410	FAX
Singapore	Tracy Carpenter	IR South East Asia (Singapore)	65 221 8371	Phone
			65 221 8372	FAX
Taiwan	Ivan Hsieh	Irtronic	8 86 2 974-3548	Phone
			8 86 2 974-3596	FAX
France	J-L Vonarburg	International Rectifier	33 16 449 5959	Phone
			33 16 449 5969	FAX
Czech Rep., Germany, Poland, Switzerland	Paul Prinz	International Rectifier (Bad Homburg)	49 6172 9659 24	Phone
			49 6172 9659 33	FAX
Germany, Austria	Ulrich Kirchenberger	International Rectifier (München)	49 89 5455 8219	Phone
			49 89 55 7443	FAX
Great Britain, Nordic Countries	Tim Munday	International Rectifier (UK)	441 883 732020	Phone
			441 883 733410	FAX
Italy, Spain, Greece, Turkey	Giuseppe Castino	International Rectifier (Italy)	39 11 451 0111	Phone
			39 11 470 4290	FAX
Russia	Vladimir Bashkirov	IR International Holdings (Moscow)	7 095 931 9646	Phone
			7 095 931 9646	FAX
Roger Miller	Worldwide Automotive	International Rectifier US (CA)	(310) 252 7161	Phone
			(310) 252 7722	FAX

International
IOR Rectifier

CONTENTS

International
IOR Rectifier

AlphaNumeric Index

Entries are sorted alphanumerically according to the following:

1. digits precede letters,
2. all characters are treated as strings, i.e. '10F' precedes '6F,'
3. entries are read from left to right, i.e. a longer string can precede a shorter string.

Index

Index

Index

Index

Index

Index

Index

Index

Index

Index

Index

Index

Index

Index

International
IOR Rectifier

Solutions From International Rectifier

International
IOR Rectifier

IRPT5051

POWIRTRAIN®

Integrated Power Stage for 15 hp Motor Drives

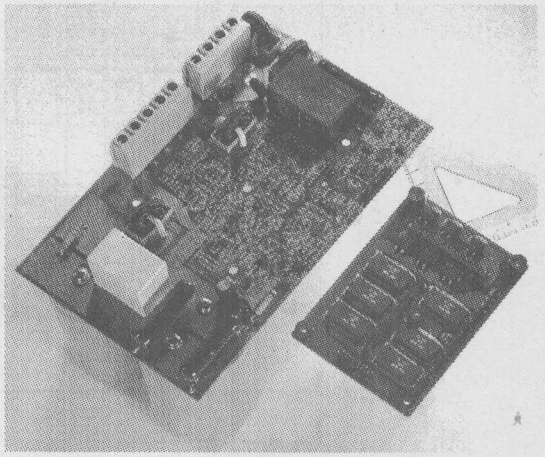
- 15 hp (11kW) power output
- 380 - 480VAC; 50/60 Hz
- Available as complete system or sub-system assemblies

Power Assembly

- 3-phase rectifier bridge
- 3-phase ultrafast IGBT inverter
- NTC temperature sensor
- Pin-to-base plate isolation 2500 Vrms
- Easy-to-mount package
- Case temperature range -20°C to 95°C operational

Driver-*Plus*Board

- Capacitor filter with precharge current limit
- Isolated gate drive circuits
- On-board local power supply for gate driver and capacitor precharge control
- MOV surge suppression at input
- Isolated inverter current feedback
- Short circuit, earth/ground fault, over-temperature protection
- Input and output terminals; optional external brake
- Control interface connector



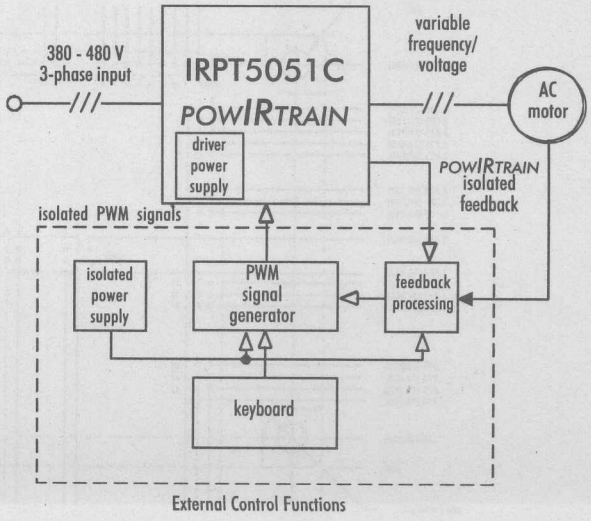
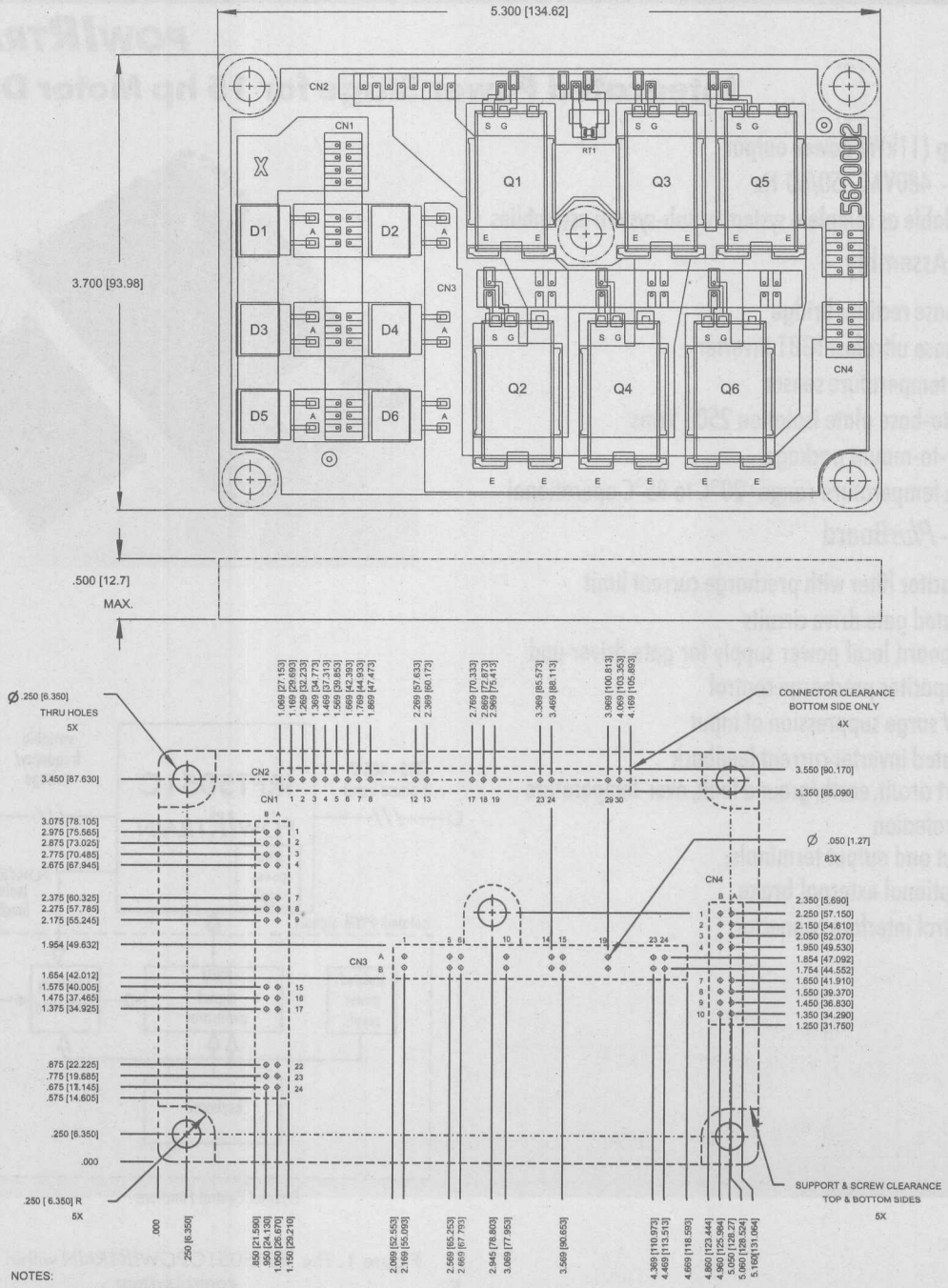


Figure 1. The IRPT5051C POWIRTRAIN within a motor control system

IRPT5051A Mechanical Specifications



NOTES:

1. MATERIAL: FR4, .065 [1.651]THICK MAX.

Specifications IRPT5051

PARAMETER	VALUES	CONDITIONS
Input Power		
Voltage	380V -15% to 480V +10%, 3-phase	
Frequency	50 - 60Hz	
Input Current	40A rms	T_A = 40°C, $R_{th\ SA}$ = 0.075 °C/W
	300 A peak	10 ms half-cycle non-repetitive surge
Output Power		
Voltage	0 - 480V rms	defined by external PWM control
Nominal Motor hp (kW)	15hp (11kW)	V_{in} = 440VAC
Nominal Motor Current	25A rms	PWM frequency = 4kHz, f_o=60Hz, T_A = 40°C, $R_{th\ SA}$ = 0.075 °C/W
DC Link		
DC link voltage	850V maximum	
Control Inputs		
Control Power	15V ±5%, 200mA positive supply 15V ±5%, 10mA, negative supply	
PWM input signals IN1 - IN6	15V, 10mA, ±10% (max rise/fall time 150nsec)	input signals uninhibited internally
Input resistance IN1 - IN6	720Ω ±5%	input signals inhibited internally
Pulse deadtime	2.5 μsecs, minimum	
Minimum input pulse duration	1.0 μsec	
Maximum pulse duration for each upper IGBT	20ms	
$\overline{\text{RESET}}$	15V active high, CMOS input (min duration 1μsec)	
SFT CHG	2 mA pull-down to energize relay (overrides internal control)	
Protection		
Output current trip level	65A peak, ±10%	
Overtemperature trip level	100°C, ±5%	
Ground current trip level	40A peak, ±10%	
Short circuit shutdown time	1.5 μsec typical	output terminals shorted
Feedback Signals		
Current feedback signal, IFB	100mV/A ±10% max. DC offset 200mV	
Overcurrent trip signal, OI	active high, 15V CMOS	
Overtemp trip signal, OT	active high, 15V CMOS	
BUS RIPPLE	15V high 4.7k pull-up, <0.5V low at 1.0mA; high-to-low transition at V_{bus}=82% peak of line voltage	
UV	15V high, 10k pull-up, during UV <0.5 low at 1mA with no UV	
Relay coil feedback, K1FB	15V high when relay coil energized; low when relay coil de-energized	
Capacitor Precharge		
DC bus capacitor precharge time	400msecs max	measured from input line closure; line voltage > 300V
Module		
Isolation Voltage	$2500V_{RMS}$, 60Hz, 1 minute	pin to baseplate isolation
Operating Case Temperature	-20°C to 95°C	
Mounting Torque	5 N-m	M5 screw type
System Environment		
Ambient Operating Temp. Range	0 to 40°C	90%RH max. (non-condensing)
Storage Temp. range	-20 to 60°C	90%RH max. (non-condensing)

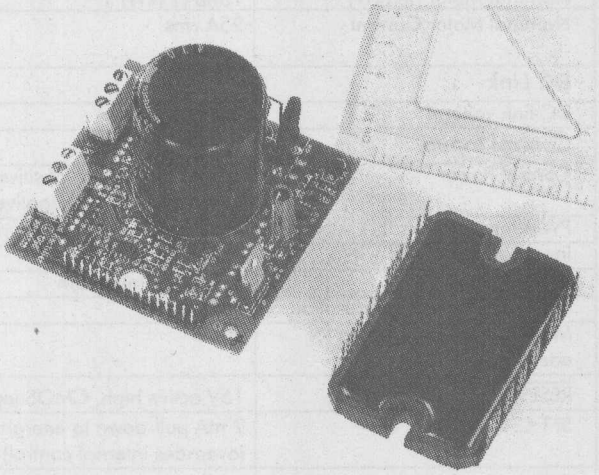
International
IOR Rectifier

IRPT1053

POWIRTRAIN™

Integrated Power Stage for 1 hp Motor Drives

- 1 hp (0.75kW) power output
  Industrial rating at 150% overload for 1 minute
- 180 - 240VAC input
- Designed per UL safety guidelines
- Available as complete system or as sub-system assemblies



Power Module

- 3-phase rectifier bridge
- 3-phase ultrafast IGBT inverter
- Low inductance (current sense) shunts in positive and negative DC rail
- NTC temperature sensor
- Pin-to-base plate isolation 2500Vrms
- Easy-to-mount two-screw package
- Case temperature range -20°C to 95°C operational

Driver-*Plus*Board

- DC bus capacitor filter with NTC inrush current limiter
- IR2132 monolithic 3-phase HVIC driver
- On-board +15V and +5V power supply
- MOV surge suppression at input
- Control interface with DC bus voltage and current feedback
- Protection for short-circuit, earth/ground fault and overtemperature
- Terminal blocks for 3-phase input and output connections

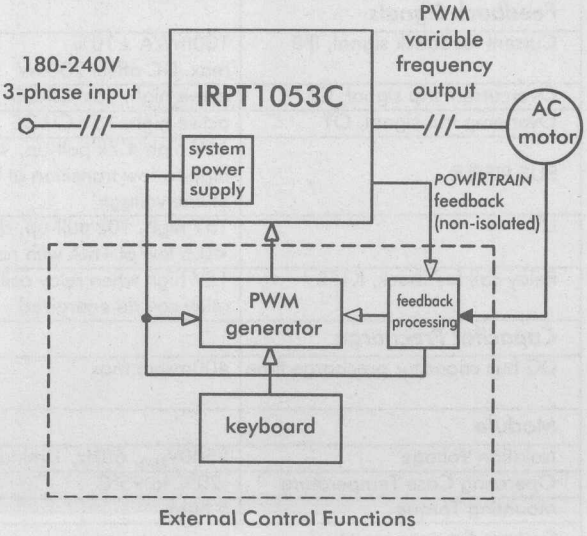
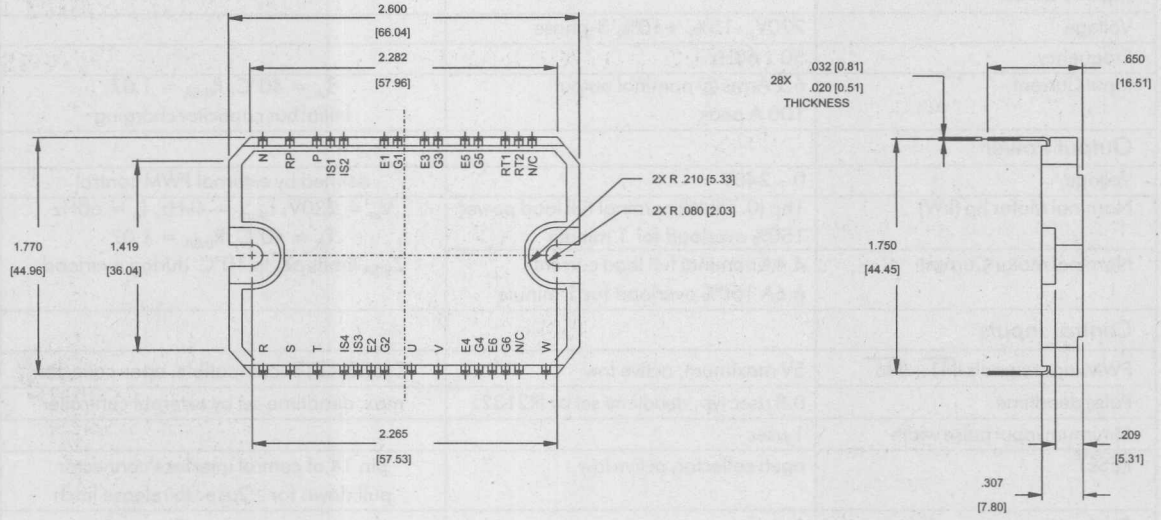
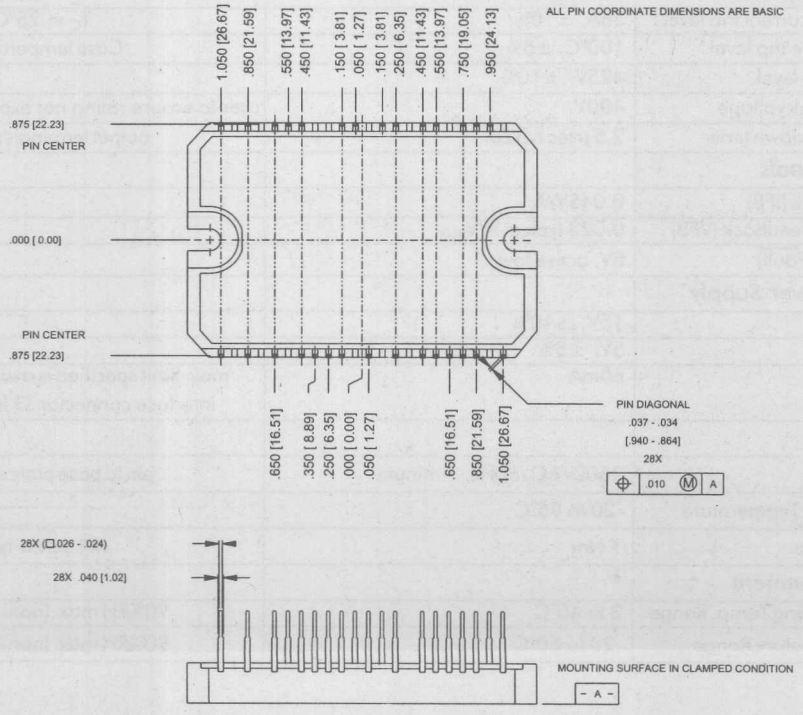


Figure 1. The IRPT1053C *POWIRTRAIN* within a motor control system

IRPT1053A Mechanical Specifications

NOTE: Dimensions are in inches [milliimeters]





Specifications

PARAMETERS	VALUES	CONDITIONS
Input Power		
Voltage	220V, -15%, +10%, 3-phase	
Frequency	50 - 60Hz	
Input Current	6.2 Arms @ nominal output 100 A peak	T_A = 40°C, R_{thSA} = 1.07 Initial bus capacitor charging
Output Power		
Voltage	0 - 240V	defined by external PWM control
Nominal Motor hp (kW)	1hp (0.75kW) nominal full load power 150% overload for 1 minute	V_{in} = 230V, f_{pwm} = 4kHz, f_o = 60Hz T_A = 40°C, R_{thSA} = 1.07 Z_{thSA} limits ΔT_c to 10°C during overload
Nominal Motor Current	4.4A nominal full load current 6.6A 150% overload for 1 minute	
Control Inputs		
PWM input signals $\overline{IN1}$...$\overline{IN6}$	5V maximum, active low	CMOS, LSTTL compatible, open collector
Pulse deadtime	0.8 µsec typ. deadtime set by IR2132J	max. deadtime set by external controller
Minimum input pulse width	1 µsec	
$\overline{RESET}$	open collector, active low	pin 14 of control interface connector pull down for ≥ 2µsec to release latch
Protection		
Output current trip level	30A, ±10%	T_C = 25°C
Earth/gnd fault current trip level	36A, ±10%	T_C = 25°C
Overtemperature trip level	100°C, ±5%	Case temperature
Overvoltage trip level	425V, ±10%	
Maximum DC link voltage	400V	user to ensure rating not exceeded for >30 sec.
Short circuit shutdown time	2.5 µsec typical	output terminals shorted
Feedback Signals		
Current feedback (IFB)	0.045V/A	
DC bus voltage feedback (VFB)	0.023 typical V/V_{BUS}	
Fault feedback ($\overline{Fault}$)	5V, active low	
On Board Power Supply		
V_{CC}	15V, ±10%	
V_{DD}	5V, ±5%	
I_{CC}+ I_{DD}	60mA	max. limit specified is available on control interface connector J3 for external use
Module		
Isolation Voltage	2500VAC, 60Hz, 1 minute	pin to base plate isolation
Operating Case Temperature	-20 to 95°C	
Mounting Torque	1 Nm	M4 screw type
System Environment		
Ambient Operating Temp. Range	0 to 40°C	90%RH max. (non-condensing)
Storage Temperature Range	-20 to 60°C	90%RH max. (non-condensing)

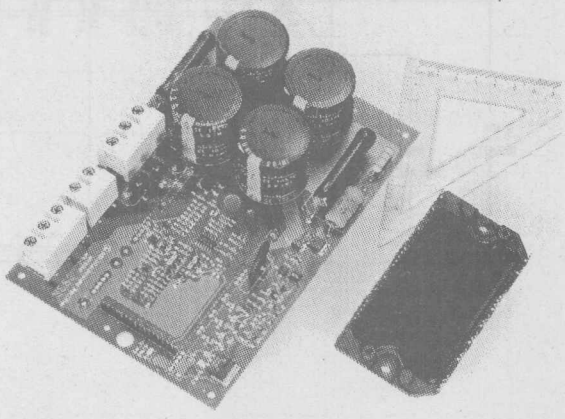
International
IOR Rectifier

IRPT2051

POWIRTRAIN™

Integrated Power Stage for 3 hp Motor Drives

- 3 hp (2.2kW) motor drive
  Industrial rating at 150% overload for 1 minute
- 380-480VAC
- Designed per UL safety guidelines
- Available as complete system or sub-system assemblies



Power Module

- 3-phase rectifier bridge
- 3-phase ultrafast IGBT inverter
- Brake IGBT and diode
- Low inductance (current sense) shunts in positive and negative DC rail
- NTC temperature sensor
- Pin-to-baseplate isolation 2500V
- Easy-to-mount two-screw package
- Case temperature range -20°C to 95°C operational

Driver-*Plus* Board

- DC bus capacitor filter with NTC inrush current limiter
- IR2233 monolithic 3-phase HVIC driver
- Driver stage for brake transistor
- On-board +15V and +5V power supply
- MOV surge suppression at input
- DC bus voltage feedback and current feedback
- Protection for short-circuit, earth/ground fault, overtemperature and overvoltage
- Terminal blocks for 3-phase input/output and brake connections

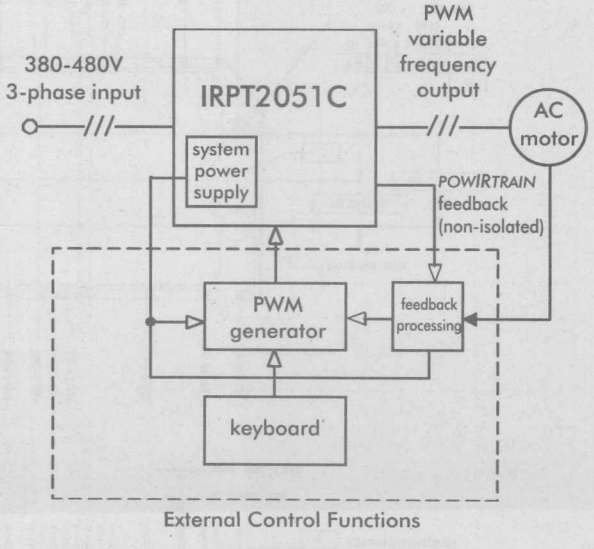
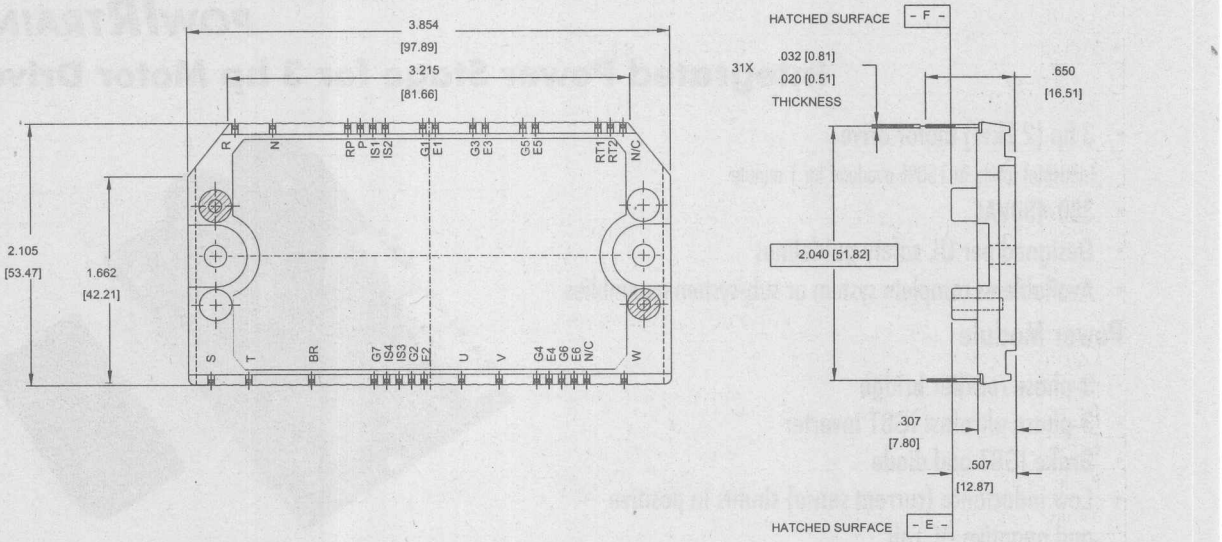
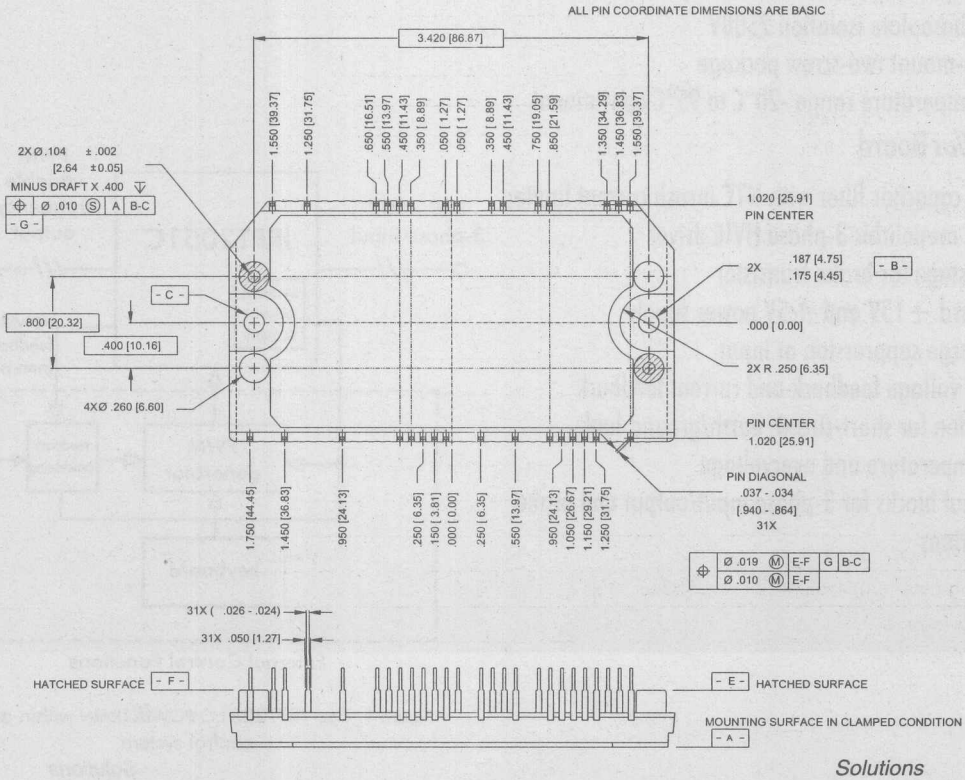


Figure 1. The IRPT2051C POWIRTRAIN within a motor control system

IRPT2051A Mechanical Specifications

NOTE: Dimensions are in inches [millimeters]





Specifications: IRPT2051

PARAMETER	VALUES	CONDITIONS
Input Power		
Voltage	380V, -15%, 480V +10%	
Frequency	50 - 60Hz	
Input current	8.26 Arms @ nominal output 125 A peak	T_A = 40°C, R_{thSA} = 0.59°C/W Initial bus capacitor charging
Output Power		
Voltage	0 - 480V	defined by external PWM control
Nominal motor hp (kW)	3hp (2.2kW) nominal full load power 150% overload for 1 minute	R_{thSA} = 0.59°C/W, V_{in} = 460VAC, f_{PWM} = 4kHz f_o = 60Hz, T_A = 40°C Z_{thSA} limits ΔT_c to 10°C during overload
Nominal motor current	5.90A nominal full load current 8.85A 150% overload for 1 minute	
Control Inputs		
$\overline{IN1}$...$\overline{IN6}$, (PWM), $\overline{IN7}$ (Brake), $\overline{RESET}$	5V maximum, active low	CMOS, LSTTL compatible, open collector
STOP	5V maximum, active high	CMOS or LSTTL compatible
Pulse deadtime	0.2μs typical, set by IR2233	maximum set by controller
Minimum input pulse width	1μs	
Protection		
Output current trip level	40A, ±10%	T_C = 25°C
Earth fault current trip level	50A, ±10%	T_C = 25°C
Overtemperature trip level	100°C, ±5%	Case temperature
Overvoltage trip level	850V, ±10%	
Maximum DC link voltage	760V	user to ensure rating not exceeded >30sec.
Short circuit shutdown time	2.5 μsec typical	output terminals shorted
Feedback Signals		
Current feedback (IFB)	0.025V/A_{BUS} typical	T_C = 25°C
DC bus voltage feedback (VFB)	0.010V/V_{BUS} typical	T_C = 25°C
Fault feedback ($\overline{FAULT}$)	5V maximum, active low	CMOS or LSTTL compatible
On Board Power Supply		
V_{CC}	15V, ±10%	
V_{DD}	5V, ±5%	
I_{CC}+ I_{DD}	60mA	available to user
Brake		
Current	7.5A	
Module		
Isolation voltage	2500V rMS	pin to base plate isolation, 60Hz, 1minute
Operating case temperature	-25°C to 125°C	
Mounting torque	1 Nm	M4 screw type
System Environment		
Ambient operating temp. range	0 to 40°C	90%RH max. (non-condensing)
Storage temperature range	-20 to 60°C	90%RH max. (non-condensing)

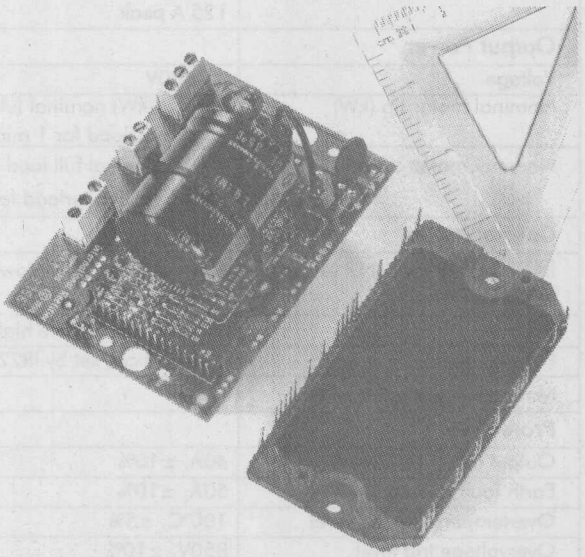
International
IOR Rectifier

IRPT1056

POWIRTRAIN™

Integrated Power Stage for 1 hp Motor Drives

- 1 hp (0.75kW) power output
  Industrial rating at 150% overload for 1 minute
- 180 - 240VAC input
- Designed per UL safety guidelines
- Available as complete system or sub-system assemblies



Power Module

- 3-phase rectifier bridge
- 3-phase ultrafast IGBT inverter
- Brake IGBT and diode
- Low inductance (current sense) shunts in positive and negative DC rail
- NTC temperature sensor
- Pin-to-baseplate isolation 2500V
- Easy-to-mount two-screw package
- Case temperature range -20°C to 95°C operational

Driver-*Plus* Board

- DC bus capacitor filter with NTC inrush current limiter
- IR2132J monolithic 3-phase HVIC driver
- Driver stage for brake transistor
- On-board +15V and +5V power supply
- MOV surge suppression at input
- Control interface with DC bus voltage and current feedback
- Protection for short-circuit, earth/ground fault overtemperature and overvoltage
- Terminal blocks for 3-phase input/output and brake connections

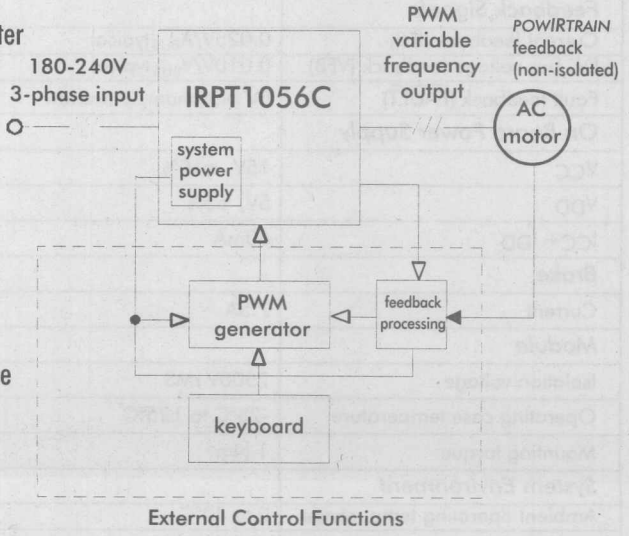
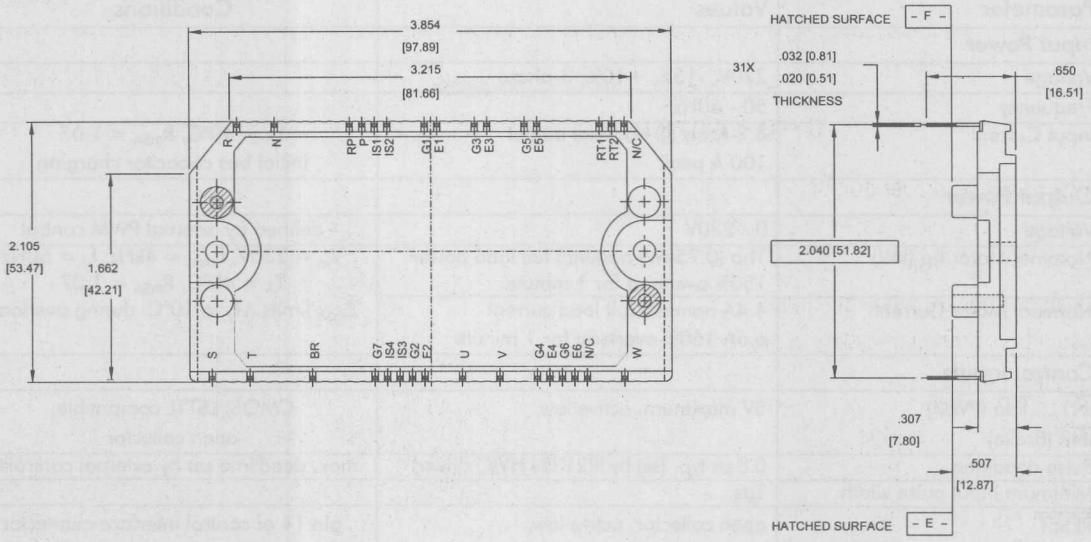
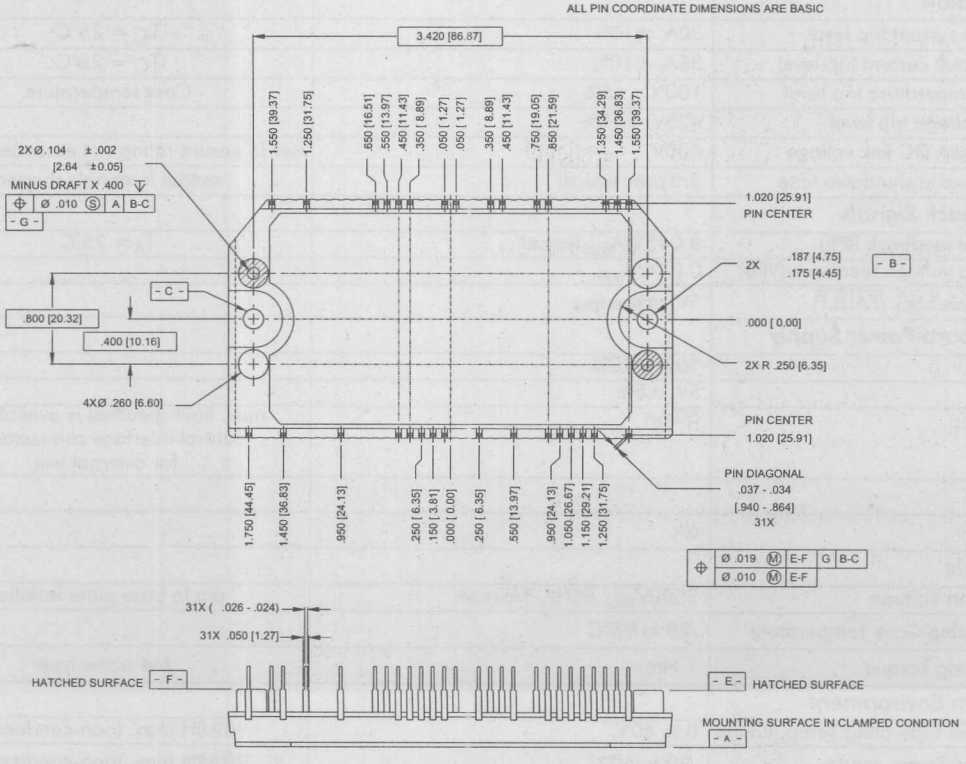


Figure 1. The IRPT1056C *POWIRTRAIN* within a motor control system

IRPT1056A Mechanical Specifications

NOTE: Dimensions are in inches [millimeters]





Specifications: IRP1056

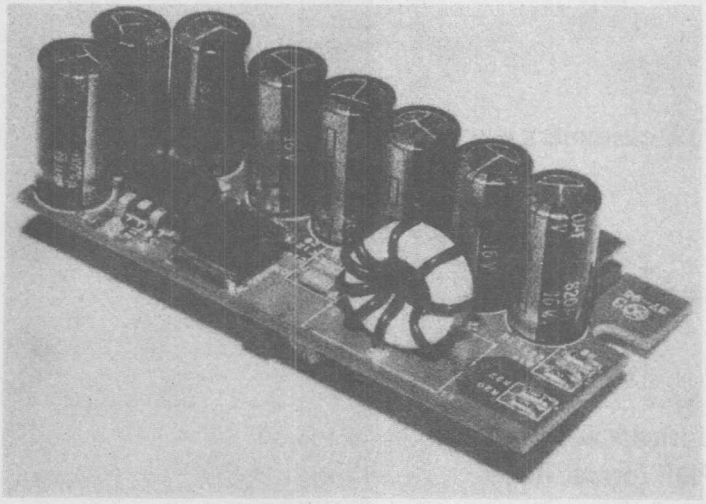
Parameter	Values	Conditions
Input Power		
Voltage	220V, -15%, +10%, 3-phase	
Frequency	50 - 60Hz	
Input Current	6.2 Arms @ nominal output 100 A peak	T_A = 40°C, R_{thSA} = 1.07 Initial bus capacitor charging
Output Power		
Voltage	0 - 230V	defined by external PWM control
Nominal Motor hp (kW)	1hp (0.75kW) nominal full load power 150% overload for 1 minute	V_{in} = 230V, f_{pwm} = 4kHz, f_o = 60Hz T_A = 40°C, R_{thSA} = 1.07 Z_{thSA} limits ΔT_c to 10°C during overload
Nominal Motor Current	4.4A nominal full load current 6.6A 150% overload for 1 minute	
Control Inputs		
$\overline{IN1}$,...,$\overline{IN6}$ (PWM) $\overline{IN7}$ (Brake)	5V maximum, active low	CMOS, LSTTL compatible, open collector
Pulse deadtime	0.8 μs typ. (set by IR2132J HVIC driver)	max. deadtime set by external controller
Minimum input pulse width	1μs	
$\overline{RESET}$	open collector, active low	pin 14 of control interface connector pull down for ≥ 2μsec to release latch
Protection		
Output current trip level	30A, ±10%	T_C = 25°C
Earth fault current trip level	36A, ±10%	T_C = 25°C
Overtemperature trip level	100°C, ±5%	Case temperature
Overvoltage trip level	425V, ±10%	
Maximum DC link voltage	400V	user to ensure rating not exceeded >30 sec
Short circuit shutdown time	2.5 μsec typical	output terminals shorted
Feedback Signals		
Current feedback (IFB)	0.045V/A_{BUS} typical	T_A = 25°C
DC bus voltage feedback (VFB)	0.014/V_{BUS}	
Fault feedback ($\overline{FAULT}$)	5V, active low	
On Board Power Supply		
V_{CC}	15V, ±10%	
V_{DD}	5V, ±5%	
I_{CC}+ I_{DD}	60mA	max. limit specified is available on control interface connector J2 for external use
Brake		
Current	6A	
Module		
Isolation Voltage	2500V_{RMS}, 60Hz, 1minute	pin to base plate isolation
Operating Case Temperature	-20 to 95°C	
Mounting Torque	1 Nm	M4 screw type
System Environment		
Ambient Operating Temp. Range	0 to 40°C	90%RH max. (non-condensing)
Storage Temp. range	-20 to 60°C	90%RH max. (non-condensing)

IRP6VRM1

Turn key power supply specification

Key Features

- Conforms to Intel 200Mhz P6 specification
- 12.4 ampere continuous output
- 2.1V-to-3.5V digitally selectable output
- 30A/uS transient load response capability
- Greater than 90% efficient
- Short circuit protected
- **Super FETKY** synchronous rectifier



The new IRP6VRM1 offers the power supply designer a complete turn-key solution for dc/dc convertors required to power next-generation microprocessors. A synchronous buck regulator topology operating at 200kHz is employed and achieves excellent efficiency with very fast load response and tight output voltage regulation.

The new Super FETKY is used in the synchronous recirculation circuitry to reduce board space and assembly cost while actually improving circuit efficiency through reduced stray inductance. Complete performance characterization along with detailed schematic, bill-of-materials, PCB layout and modelling are offered to reduce the customer's design time and effort.

Purpose

This is a production ready design. It has been thoroughly tested for performance against the Intel P6 power specification, and evaluated for manufacturability by a high volume manufacturer.

This design will not be manufactured by International Rectifier. It's purpose is to simplify the design and qualification process for our customers.

Demo Boards

Completed boards are available free to IR customers, and at a reasonable charge to others.

Design Modifications

If your design has different requirements, contact your local representative for assistance.

Web Site

This design may be downloaded in two formats at IR's web site (http://www.irf.com). One is PDF format for on screen viewing or printing, the other is in native format.

Floppy Disk

The design is also available on floppy disk. As on our web site, the floppy version contains two formats, PDF and native format.

International
IOR Rectifier

Product Data

Bridges

International
IOR Rectifier

Part Number	V_{RRM} (V)	I_O (A)	@T_C (°C)	V_{FM}@ I_{FM} (V)	(A)	I_{FSM} 50 Hz (A)	60 Hz (A)	$R_{\Theta JC}$ K/W	I_{RM} (µA)	Notes	Fax-on-Demand	Outline
Single Phase												
Schottky										D-70		
1BQ20	20	1	45	0.65	1	30	31	60	5	2 3 6 7		B1
1BQ40	40	1	45	0.65	1	30	31	60	5	2 3 6 7		
Diode										D-71		
DF005S	50	1	40	1	1	30	31	60	5	2 5 6 7 15	82788	B2
DF01S	100	1	40	1	1	30	31	60	5	2 5 6 7 15	82788	
DF02S	200	1	40	1	1	30	31	60	5	2 5 6 7 15	82788	
DF04S	400	1	40	1	1	30	31	60	5	2 5 6 7 15	82788	
DF06S	600	1	40	1	1	30	31	60	5	2 5 6 7 15	82788	
DF08S	800	1	40	1	1	30	31	60	5	2 5 6 7 15	82788	
DF10S	1000	1	40	1	1	30	31	60	5	2 5 6 7 15	82788	
Diode										D-70		
DF005M	50	1	40	1	1	30	31	60	5	2 6 7 15	82788	B1
DF01M	100	1	40	1	1	30	31	60	5	2 6 7 15	82788	
DF02M	200	1	40	1	1	30	31	60	5	2 6 7 15	82788	
DF04M	400	1	40	1	1	30	31	60	5	2 6 7 15	82788	
DF06M	600	1	40	1	1	30	31	60	5	2 6 7 15	82788	
DF08M	800	1	40	1	1	30	31	60	5	2 6 7 15	82788	
DF10M	1000	1	40	1	1	30	31	60	5	2 6 7 15	82788	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink'
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Bridges

International
IOR Rectifier

Single Phase

Diode

D-71

Available in Europe only

Part Number	V_{RRM} (V)	I_O (A)	@T_C (°C)	V_{FM}@ I_{FM} (V)	I_{FM} (A)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\Theta JC}$ K/W	I_{RM} (μA)	Notes	Fax-on-Demand	Outline
1B005S	50	1	40	1	1	30	31	60	5	*2 5 6 7 15*		B2
1B01S	100	1	40	1	1	30	31	60	5	*2 5 6 7 15*		
1B02S	200	1	40	1	1	30	31	60	5	*2 5 6 7 15*		
1B04S	400	1	40	1	1	30	31	60	5	*2 5 6 7 15*		
1B06S	600	1	40	1	1	30	31	60	5	*2 5 6 7 15*		
1B08S	800	1	40	1	1	30	31	60	5	*2 5 6 7 15*		
1B10S	1000	1	40	1	1	30	31	60	5	*2 5 6 7 15*		

Diode

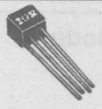
D-70

Available in Europe only

1B005	50	1	40	1	1	30	31	60	5	*2 6 7 15*		B1
1B01	100	1	40	1	1	30	31	60	5	*2 6 7 15*		
1B02	200	1	40	1	1	30	31	60	5	*2 6 7 15*		
1B04	400	1	40	1	1	30	31	60	5	*2 6 7 15*		
1B06	600	1	40	1	1	30	31	60	5	*2 6 7 15*		
1B08	800	1	40	1	1	30	31	60	5	*2 6 7 15*		
1B10	1000	1	40	1	1	30	31	60	5	*2 6 7 15*		

Diode

D-38



1KAB05E	50	1.5	45	1	1	50	52		10	*2 4 6 15*	82732	B3
1KAB10E	100	1.5	45	1	1	50	52		10	*2 4 6 15*	82732	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 μs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Bridges

International
IOR Rectifier

Part Number	V_{RRM} (V)	I_O (A)	@T_C (°C)	V_{FM}@ I_{FM} (V)	I_{FM} (A)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\Theta JC}$ K/W	I_{RM} (µA)	Notes	Fax-on-Demand	Outline
Single Phase												
1KAB20E	200	1.5	45	1	1	50	52		10	2 4 6 15	82732	B3
1KAB40E	400	1.5	45	1	1	50	52		10	2 4 6 15	82732	
1KAB60E	600	1.5	45	1	1	50	52		10	2 4 6 15	82732	
1KAB80E	800	1.5	45	1	1	50	52		10	2 4 6 15	82732	
1KAB100E	1000	1.5	45	1	1	50	52		10	2 4 6 15	82732	
Diode											D-37	
2KBB05R	50	2	45	1	3	50	52		10	2 3 4 6	82733	B5
2KBB05	50	2	45	1	3	50	52		10	2 3 4 6	82733	
2KBB10R	100	2	45	1	3	50	52		10	2 3 4 6	82733	
2KBB10	100	2	45	1	3	50	52		10	2 3 4 6	82733	
2KBB20	200	2	45	1	3	50	52		10	2 3 4 6	82733	
2KBB20R	200	2	45	1	3	50	52		10	2 3 4 6	82733	
2KBB40	400	2	45	1	3	50	52		10	2 3 4 6	82733	
2KBB40R	400	2	45	1	3	50	52		10	2 3 4 6	82733	
2KBB60	600	2	45	1	3	50	52		10	2 3 4 6	82733	
2KBB60R	600	2	45	1	3	50	52		10	2 3 4 6	82733	
2KBB80	800	2	45	1	3	50	52		10	2 3 4 6	82733	
2KBB80R	800	2	45	1	3	50	52		10	2 3 4 6	82733	
2KBB100	1000	2	45	1	3	50	52		10	2 3 4 6	82733	
2KBB100R	1000	2	45	1	3	50	52		10	2 3 4 6	82733	
Diode											D-44	
2KBP005	50	2	50	1	2	60	63		10	2 3 4 6	82753	B6
2KBP01	100	2	50	1	2	60	63		10	2 3 4 6	82753	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Bridges

International
IOR Rectifier

Part Number	V_{RRM} (V)	I_O (A)	@T_C (°C)	V_{FM} @ I_{FM} (V)	I_{FM} (A)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\Theta JC}$ K/W	I_{RM} (µA)	Notes	Fax-on-Demand	Outline
Single Phase												
2KBP02	200	2	50	1	2	60	63		10	2 3 4 6	82753	B6
2KBP04	400	2	50	1	2	60	63		10	2 3 4 6	82753	
2KBP06	600	2	50	1	2	60	63		10	2 3 4 6	82753	
2KBP08	800	2	50	1	2	60	63		10	2 3 4 6	82753	
2KBP10	1000	2	50	1	2	60	63		10	2 3 4 6	82753	
Diode										D-46		
KBPC1005	50	3	50	1	1.5	50	55		10	2	82754	B7
KBPC101	100	3	50	1	1.5	50	55		10	2	82754	
KBPC102	200	3	50	1	1.5	50	55		10	2	82754	
KBPC104	400	3	50	1	1.5	50	55		10	2	82754	
KBPC106	600	3	50	1	1.5	50	55		10	2	82754	
KBPC108	800	3	50	1	1.5	50	55		10	2	82754	
KBPC110	1000	3	50	1	1.5	50	55		10	2	82754	
Diode										D-72		
KBPC6005	50	6	50	1	3	100	109		10	2 3	82754	B8
KBPC601	100	6	50	1	3	100	109		10	2 3	82754	
KBPC602	200	6	50	1	3	100	109		10	2 3	82754	
KBPC604	400	6	50	1	3	100	109		10	2 3	82754	
KBPC606	600	6	50	1	3	100	109		10	2 3	82754	
KBPC608	800	6	50	1	3	100	109		10	2 3	82754	
KBPC610	1000	6	50	1	3	100	109		10	2 3	82754	
KBPC8005	50	8	50	1	3	125	137		400	2 3	82789	
KBPC801	100	8	50	1	3	125	137		400	2 3	82789	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Bridges

International
IOR Rectifier

Part Number	V_{RRM} (V)	I_O (A)	@T_C (°C)	V_{FM} @ I_{FM} (V)	(A)	I_{FSM} 50 Hz (A)	60 Hz (A)	$R_{\Theta JC}$ K/W	I_{RM} (µA)	Notes	Fax-on-Demand	Outline
Single Phase												
KBPC802	200	8	50	1	3	125	137		400	2 3	82789	B8
KBPC804	400	8	50	1	3	125	137		400	2 3	82789	
KBPC806	600	8	50	1	3	125	137		400	2 3	82789	
KBPC808	800	8	50	1	3	125	137		400	2 3	82789	
KBPC810	1000	8	50	1	3	125	137		400	2 3	82789	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Single Phase

Diode

D-34A

Part Number- Europe

Part Number		V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM}@ I_{FM} (V)	(A)	I_{FSM} 50 Hz (A)	60 Hz (A)	$R_{\Theta JC}$ (DC) °C/W	Notes	Fax-on-Demand	Outline
100JB05L		50	10	65	1.3	16	125	130	3.5	*2 8 9 10*	80715	B11
100JB1L		100	10	65	1.3	16	125	130	3.5	*2 8 9 10*	80715	
100JB2L		200	10	65	1.3	16	125	130	3.5	*2 8 9 10*	80715	
100JB4L		400	10	65	1.3	16	125	130	3.5	*2 8 9 10*	80715	
100JB6L		600	10	65	1.3	16	125	130	3.5	*2 8 9 10*	80715	
100JB8L		800	10	65	1.3	16	125	130	3.5	*2 8 9 10*	80715	
100JB10L		1000	10	65	1.3	16	125	130	3.5	*2 8 9 10*	80715	
100JB12L		1200	10	65	1.3	16	125	130	3.5	*2 8 9 10*	80715	
100JB14L		1400	10	65	1.3	16	125	130	3.5	*2 8 9 10*	80715	
100JB16L		1600	10	65	1.3	16	125	130	3.5	*2 8 9 10*	80715	
250JB05L	26MB05A	50	25	65	1.1	40	335	350	1.7	*2 8 9 10*	80715	
250JB1L	26MB10A	100	25	65	1.1	40	335	350	1.7	*2 8 9 10*	80715	
250JB2L	26MB20A	200	25	65	1.1	40	335	350	1.7	*2 8 9 10*	80715	
250JB4L	26MB40A	400	25	65	1.1	40	335	350	1.7	*2 8 9 10*	80715	
250JB6L	26MB60A	600	25	65	1.1	40	335	350	1.7	*2 8 9 10*	80715	
250JB8L	26MB80A	800	25	65	1.1	40	335	350	1.7	*2 8 9 10*	80715	
250JB10L	26MB100A	1000	25	65	1.1	40	335	350	1.7	*2 8 9 10*	80715	
250JB12L	26MB120A	1200	25	65	1.1	40	335	350	1.7	*2 8 9 10*	80715	
250JB14L	26MB140A	1400	25	65	1.1	40	335	350	1.7	*2 8 9 10*	80715	
250JB16L	26MB160A	1600	25	65	1.1	40	335	350	1.7	*2 8 9 10*	80715	
35MB05A	36MB05A	50	35	60	1.2	55	400	420	1.2	*2 8 9 10*	80715	
35MB10A	36MB10A	100	35	60	1.2	55	400	420	1.2	*2 8 9 10*	80715	
35MB20A	36MB20A	200	35	60	1.2	55	400	420	1.2	*2 8 9 10*	80715	
35MB40A	36MB40A	400	35	60	1.2	55	400	420	1.2	*2 8 9 10*	80715	
35MB60A	36MB60A	600	35	60	1.2	55	400	420	1.2	*2 8 9 10*	80715	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Bridges

International
IOR Rectifier

Part Number		V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM} @ I_{FM} (V)	(A)	I_{FSM} 50 Hz (A)	60 Hz (A)	$R_{\theta JC}$ (DC) °C/W	Notes	Fax-on-Demand	Outline
Single Phase												
35MB80A	36MB80A	800	35	60	1.2	55	400	420	1.2	2 8 9 10	80715	B11
35MB100A	36MB100A	1000	35	60	1.2	55	400	420	1.2	2 8 9 10	80715	
35MB120A	36MB120A	1200	35	60	1.2	55	400	420	1.2	2 8 9 10	80715	
35MB140A	36MB140A	1400	35	60	1.2	55	400	420	1.2	2 8 9 10	80715	
35MB160A	36MB160A	1600	35	60	1.2	55	400	420	1.2	2 8 9 10	80715	
Diode												D-63
26MT5		50	25	70	1.26	40	300	314	1.42	2 8 10	80771	B12
26MT10		100	25	70	1.26	40	300	314	1.42	2 8 10	80771	
26MT20		200	25	70	1.26	40	300	314	1.42	2 8 10	80771	
26MT40		400	25	70	1.26	40	300	314	1.42	2 8 10	80771	
26MT60		600	25	70	1.26	40	300	314	1.42	2 8 10	80771	
26MT80		800	25	70	1.26	40	300	314	1.42	2 8 10	80771	
26MT100		1000	25	70	1.26	40	300	314	1.42	2 8 10	80771	
26MT120		1200	25	70	1.26	40	300	314	1.42	2 8 10	80771	
26MT140		1400	25	70	1.26	40	300	314	1.42	2 8 10	80771	
26MT160		1600	25	70	1.26	40	300	314	1.42	2 8 10	80771	
36MT5		50	35	60	1.19	40	400	420	1.16	2 8 10	80771	
36MT10		100	35	60	1.19	40	400	420	1.16	2 8 10	80771	
36MT20		200	35	60	1.19	40	400	420	1.16	2 8 10	80771	
36MT40		400	35	60	1.19	40	400	420	1.16	2 8 10	80771	
36MT60		600	35	60	1.19	40	400	420	1.16	2 8 10	80771	
36MT80		800	35	60	1.19	40	400	420	1.16	2 8 10	80771	
36MT100		1000	35	60	1.19	40	400	420	1.16	2 8 10	80771	
36MT120		1200	35	60	1.19	40	400	420	1.16	2 8 10	80771	
36MT140		1400	35	60	1.19	40	400	420	1.16	2 8 10	80771	
36MT160		1600	35	60	1.19	40	400	420	1.16	2 8 10	80771	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Three-Phase

Diode

INT-A-Pak (B13)

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM} @ I_{FM} (V)	(A)	I_{FSM} 50 Hz (A)	60 Hz (A)	$R_{\theta JC}$ (DC) °C/W	Notes	Fax-on-Demand	Outline
60MT80K	800	60	85	1.75	100	350	370	0.37	2 8 11	87109	B13
60MT100K	1000	60	85	1.75	100	350	370	0.37	2 8 11	87109	
60MT120K	1200	60	85	1.75	100	350	370	0.37	2 8 11	87109	
60MT140K	1400	60	85	1.75	100	350	370	0.37	2 8 11	87109	
60MT160K	1600	60	85	1.75	100	350	370	0.37	2 8 11	87109	
70MT80K	800	70	85	1.55	100	400	420	0.292	2 8 11	87109	
70MT100K	1000	70	85	1.55	100	400	420	0.292	2 8 11	87109	
70MT120K	1200	70	85	1.55	100	400	420	0.292	2 8 11	87109	
70MT140K	1400	70	85	1.55	100	400	420	0.292	2 8 11	87109	
70MT160K	1600	70	85	1.55	100	400	420	0.292	2 8 11	87109	
90MT80K	800	90	90	1.6	150	650	680	0.21	2 8 11	87110	
90MT100K	1000	90	90	1.6	150	650	680	0.21	2 8 11	87110	
90MT120K	1200	90	90	1.6	150	650	680	0.21	2 8 11	87110	
90MT140K	1400	90	90	1.6	150	650	680	0.21	2 8 11	87110	
90MT160K	1600	90	90	1.6	150	650	680	0.21	2 8 11	87110	
110MT80K	800	110	90	1.4	150	800	840	0.178	2 8 11	87110	
110MT100K	1000	110	90	1.4	150	800	840	0.178	2 8 11	87110	
110MT120K	1200	110	90	1.4	150	800	840	0.178	2 8 11	87110	
110MT140K	1400	110	90	1.4	150	800	840	0.178	2 8 11	87110	
110MT160K	1600	110	90	1.4	150	800	840	0.178	2 8 11	87110	
130MT80K	800	130	85	1.63	200	950	1000	0.155	2 8 11	87111	
130MT100K	1000	130	85	1.63	200	950	1000	0.155	2 8 11	87111	
130MT120K	1200	130	85	1.63	200	950	1000	0.155	2 8 11	87111	
130MT140K	1400	130	85	1.63	200	950	1000	0.155	2 8 11	87111	
130MT160K	1600	130	85	1.63	200	950	1000	0.155	2 8 11	87111	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Bridges

International
IOR Rectifier

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM} @ I_{FM} (V)	(I_{FM}) (A)	I_{FSM} 50 Hz (A)	60 Hz (A)	$R_{\Theta JC}$ (DC) °C/W	Notes	Fax-on-Demand	Outline
Three-Phase											
160MT80K	800	160	85	1.49	200	1200	1260	0.121	*2 8 11*	87111	B13
160MT100K	1000	160	85	1.49	200	1200	1260	0.121	*2 8 11*	87111	
160MT120K	1200	160	85	1.49	200	1200	1260	0.121	*2 8 11*	87111	
160MT140K	1400	160	85	1.49	200	1200	1260	0.121	*2 8 11*	87111	
160MT160K	1600	160	85	1.49	200	1200	1260	0.121	*2 8 11*	87111	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Plastic Standard Recovery Diodes in D-Pak, D² Pak, TO-220 & TO-247 packages

EW,ET & EP Series 8-80A, 800-1600V

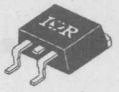
	8A	10A	20A	20A	30A	40A	60A
Voltage Grade	D-Pak	TO-220AC	D^2-Pak	TO-220AC	TO-247 (3-pin)	TO-247	TO-247 (2-pin)
800	8EWS08S	10ETS08	20ETS08S	20ETS08	30DPS08	40EPS08	60EPS08
1200	8EWS12S	10ETS12	20ETS12S	20ETS12	30DPS12	40EPS12	60EPS12
1600	8EWS16S	10ETS16	20ETS16S	20ETS16	30DPS16	40EPS16	60EPS16

Diodes

International
IOR Rectifier

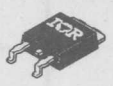
Standard Recovery

D²Pak



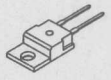
Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM}@ I_{FM} (V)	I_{FM} (A)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\Theta JC}$ (DC) °C/W	Notes	Fax-on-Demand	Outline
10ETS08S	800	10	105	1.1	10	170	175	2.5	*1* *12*		J4
10ETS12S	1200	10	105	1.1	10	170	175	2.5	*1* *12*		
10ETS16S	1600	10	105	1.1	10	170	175	2.5	*1* *12*		
20ETS08S	800	20	105	1.1	20	250	260	1.3	*1* *12*	82102	
20ETS12S	1200	20	105	1.1	20	250	260	1.3	*1* *12*	82102	
20ETS16S	1600	20	105	1.1	20	250	260	1.3	*1* *12*	82102	

D-Pak



8EWS08S	800	8	95	1.1	8.0	170	175	3.0	*1* *12*		H5
8EWS12S	1200	8	95	1.1	8.0	170	175	3.0	*1* *12*		
8EWS16S	1600	8	95	1.1	8.0	170	175	3.0	*1* *12*		

TO-220AC (2-pin)



10ETS08	800	10	105	1.1	10	170	175	2.5	*12*		J10A
10ETS12	1200	10	105	1.1	10	170	175	2.5	*12*		
10ETS16	1600	10	105	1.1	10	170	175	2.5	*12*		
20ETS08	800	20	105	1.1	20	250	260	1.3	*12*	82101	
20ETS12	1200	20	105	1.1	20	250	260	1.3	*12*	82101	
20ETS16	1600	20	105	1.1	20	250	260	1.3	*12*	82101	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Standard Recovery

TO-247AC (2-pin)

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM}@ I_{FM} (V)	I_{FM} (A)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\Theta JC}$ (DC) °C/W	Notes	Fax-on-Demand	Outline
40EPS08	800	40	105	1.1	40	400	380	0.60	*12*	82104	J12A
40EPS12	1200	40	105	1.1	40	400	380	0.60	*12*	82104	
40EPS16	1600	40	105	1.1	40	400	380	0.60	*12*	82104	
60EPS08	800	60	105	1.1	60	700	735	0.45	*12*		
60EPS12	1200	60	105	1.1	60	700	735	0.45	*12*		
60EPS16	1600	60	105	1.1	60	700	735	0.45	*12*		

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Diodes

International
IOR Rectifier

Standard Recovery

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM} @ π X $I_{F(AV)}$ (V)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\Theta JC(DC)}$ °C/W	Notes	Fax-on-Demand	Outline
SMB										
SM4001TR	50	1	75	1.1	28	30	30	*1 9 12*		R1
SM4002TR	100	1	75	1.1	28	30	30	*1 9 12*		
SM4003TR	200	1	75	1.1	28	30	30	*1 9 12*		
SM4004TR	400	1	75	1.1	28	30	30	*1 9 12*		
SM4005TR	600	1	75	1.1	28	30	30	*1 9 12*		
SM4006TR	800	1	75	1.1	28	30	30	*1 9 12*		
SM4007TR	1000	1	75	1.1	28	30	30	*1 9 12*		
B-47PP										
8AF05NPP	50	50	150	1.45	600	628	0.6	*9 12 16*	20086	R5
8AF1NPP	100	50	150	1.45	600	628	0.6	*9 12 16*	20086	
8AF2NPP	200	50	150	1.45	600	628	0.6	*9 12 16*	20086	
8AF4NPP	400	50	150	1.45	600	628	0.6	*9 12 16*	20086	
DO-203AA (DO-4)										
6F10	100	6	158	1.1	134	141	2.5	*9 12 17 18*	20009	R6
6F20	200	6	158	1.1	134	141	2.5	*9 12 17 18*	20009	
6F40	400	6	158	1.1	134	141	2.5	*9 12 17 18*	20009	
6F60	600	6	158	1.1	134	141	2.5	*9 12 17 18*	20009	
6F80	800	6	158	1.1	134	141	2.5	*9 12 17 18*	20009	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM} @ π X $I_{F(AV)}$ (V)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\Theta JC(DC)}$ °C/W	Notes	Fax-on-Demand	Outline
Standard Recovery										
6F100	1000	6	158	1.1	134	141	2.5	9 12 17 18	20009	R6
6F120	1200	6	158	1.1	134	141	2.5	9 12 17 18	20009	
1N1199A	50	12	150	1.35	230	240	2	9 12 17	20084	
12F10	100	12	144	1.26	225	235	2	9 12 17 18	20009	
1N1200A	100	12	150	1.35	230	240	2	9 12 17	20084	
1N1201A	150	12	150	1.35	230	240	2	9 12 17	20084	
1N1202A	200	12	150	1.35	230	240	2	9 12 17	20084	
12F20	200	12	144	1.26	225	235	2	9 12 17 18	20009	
1N1203A	300	12	150	1.35	230	240	2	9 12 17	20084	
12F40	400	12	144	1.26	225	235	2	9 12 17 18	20009	
1N1204A	400	12	150	1.35	230	240	2	9 12 17	20084	
1N1205A	500	12	150	1.35	230	240	2	9 12 17	20084	
1N1206A	600	12	150	1.35	230	240	2	9 12 17	20084	
12F60	600	12	144	1.26	225	235	2	9 12 17 18	20009	
1N3670A	700	12	150	1.35	230	240	2	9 12 17	20084	
12F80	800	12	144	1.26	225	235	2	9 12 17 18	20009	
1N3671A	800	12	150	1.35	230	240	2	9 12 17	20084	
1N3672A	900	12	150	1.35	230	240	2	9 12 17	20084	
12F100	1000	12	144	1.26	225	235	2	9 12 17 18	20009	
1N3673A	1000	12	150	1.35	230	240	2	9 12 17	20084	
12F120	1200	12	144	1.26	225	235	2	9 12 17 18	20009	
16F10	100	16	140	1.23	295	310	1.6	9 12 17 18	20009	
16F20	200	16	140	1.23	295	310	1.6	9 12 17 18	20009	
16F40	400	16	140	1.23	295	310	1.6	9 12 17 18	20009	
16F60	600	16	140	1.23	295	310	1.6	9 12 17 18	20009	
16F80	800	16	140	1.23	295	310	1.6	9 12 17 18	20009	
16F100	1000	16	140	1.23	295	310	1.6	9 12 17 18	20009	
16F120	1200	16	140	1.23	295	310	1.6	9 12 17 18	20009	
25F10	100	25	120	0.9	300	314	1.5	9 12 17 18	80018	
25F20	200	25	120	0.9	300	314	1.5	9 12 17 18	80018	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Diodes

International
IOR Rectifier

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM} @ π X $I_{F(AV)}$ (V)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\Theta JC(DC)}$ °C/W	Notes	Fax-on-Demand	Outline
Standard Recovery										
25F40	400	25	120	0.9	300	314	1.5	9 12 17 18	80018	R6
25F60	600	25	120	0.9	300	314	1.5	9 12 17 18	80018	
25F80	800	25	120	0.9	300	314	1.5	9 12 17 18	80018	
25F100	1000	25	120	0.9	300	314	1.5	9 12 17 18	80018	
25F120	1200	25	120	0.9	300	314	1.5	9 12 17 18	80018	
								DO-203AB (DO-5)		
1N3208	50	15	150	1.5	239	250	0.65	12 17	20010	R7
1N3209	100	15	150	1.5	239	250	0.65	12 17	20010	
1N3210	200	15	150	1.5	239	250	0.65	12 17	20010	
1N3211	300	15	150	1.5	239	250	0.65	12 17	20010	
1N3212	400	15	150	1.5	239	250	0.65	12 17	20010	
1N3213	500	15	150	1.5	239	250	0.65	12 17	20010	
1N3214	600	15	150	1.5	239	250	0.65	12 17	20010	
1N1183	50	35	140	1.7	480	500	1	9 12 17	20087	
1N1184	100	35	140	1.7	480	500	1	9 12 17	20087	
1N1185	150	35	140	1.7	480	500	1	9 12 17	20087	
1N1186	200	35	140	1.7	480	500	1	9 12 17	20087	
1N1187	300	35	140	1.7	480	500	1	9 12 17	20087	
1N1188	400	35	140	1.7	480	500	1	9 12 17	20087	
1N1189	500	35	140	1.7	480	500	1	9 12 17	20087	
1N1190	600	35	140	1.7	480	500	1	9 12 17	20087	
1N3765	700	35	140	1.8	380	400	1	9 12 17	20087	
1N3766	800	35	140	1.8	380	400	1	9 12 17	20087	
1N3767	900	35	140	1.8	380	400	1	9 12 17	20087	
1N3768	1000	35	140	1.8	380	400	1	9 12 17	20087	
1N1183A	50	40	150	1.3	765	800	1.1	9 12 17	20087	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM} @ π X $I_{F(AV)}$ (V)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\theta JC(DC)}$ °C/W	Notes	Fax-on-Demand	Outline
Standard Recovery										
40HF10	100	40	140	1.3	480	500	1	9 12 17 18	20014	R7
1N1184A	100	40	150	1.3	765	800	1.1	9 12 17	20087	
1N1185A	150	40	150	1.3	765	800	1.1	9 12 17	20087	
40HF20	200	40	140	1.3	480	500	1	9 12 17 18	20014	
1N1186A	200	40	150	1.3	765	800	1.1	9 12 17	20087	
1N1187A	300	40	150	1.3	765	800	1.1	9 12 17	20087	
40HF40	400	40	140	1.3	480	500	1	9 12 17 18	20014	
1N1188A	400	40	150	1.3	765	800	1.1	9 12 17	20087	
1N1189A	500	40	150	1.3	765	800	1.1	9 12 17	20087	
40HF60	600	40	140	1.3	480	500	1	9 12 17 18	20014	
1N1190A	600	40	150	1.3	765	800	1.1	9 12 17	20087	
40HF80	800	40	140	1.3	480	500	1	9 12 17 18	20014	
40HF100	1000	40	140	1.3	480	500	1	9 12 17 18	20014	
40HF120	1200	40	140	1.3	480	500	1	9 12 17 18	20014	
40HF140	1400	40	110	1.3	480	500	1	9 12 17 18	20014	
40HF160	1600	40	110	1.3	480	500	1	9 12 17 18	20014	
1N2128A	50	60	140	1.3	860	900	0.65	9 12 17	20087	
1N2129A	100	60	140	1.3	860	900	0.65	9 12 17	20087	
1N2130A	150	60	140	1.3	860	900	0.65	9 12 17	20087	
1N2131A	200	60	140	1.3	860	900	0.65	9 12 17	20087	
1N2133A	300	60	140	1.3	860	900	0.65	9 12 17	20087	
1N2135A	400	60	140	1.3	860	900	0.65	9 12 17	20087	
1N2137A	500	60	140	1.3	860	900	0.65	9 12 17	20087	
1N2138A	600	60	140	1.3	860	900	0.65	9 12 17	20087	
70HF10	100	70	140	1.35	1000	1050	0.45	9 12 17 18	20014	
70HF20	200	70	140	1.35	1000	1050	0.45	9 12 17 18	20014	
70HF40	400	70	140	1.35	1000	1050	0.45	9 12 17 18	20014	
70HF60	600	70	140	1.35	1000	1050	0.45	9 12 17 18	20014	
70HF80	800	70	140	1.35	1000	1050	0.45	9 12 17 18	20014	
70HF100	1000	70	140	1.35	1000	1050	0.45	9 12 17 18	20014	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM} @ π X $I_{F(AV)}$ (V)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\Theta JC(DC)}$ °C/W	Notes	Fax-on-Demand	Outline
Standard Recovery										
70HF120	1200	70	140	1.35	1000	1050	0.45	*9 12 17 18*	20014	R7
70HF140	1400	70	110	1.35	1000	1050	0.45	*9 12 17 18*	20014	
70HF160	1600	70	110	1.35	1000	1050	0.45	*9 12 17 18*	20014	
88HF10	100	85	140	1.2	1450	1500	0.35	*9 12 17*	20014	R8
85HF10	100	85	140	1.2	1450	1500	0.35	*9 12 17 18*	20014	R7
88HF20	200	85	140	1.2	1450	1500	0.35	*9 12 17*	20014	R8
85HF20	200	85	140	1.2	1450	1500	0.35	*9 12 17 18*	20014	R7
85HF40	400	85	140	1.2	1450	1500	0.35	*9 12 17 18*	20014	
88HF40	400	85	140	1.2	1450	1500	0.35	*9 12 17*	20014	R8
85HF60	600	85	140	1.2	1450	1500	0.35	*9 12 17 18*	20014	R7
88HF60	600	85	140	1.2	1450	1500	0.35	*9 12 17*	20014	R8
88HF80	800	85	140	1.2	1450	1500	0.35	*9 12 17*	20014	
85HF80	800	85	140	1.2	1450	1500	0.35	*9 12 17 18*	20014	R7
85HF100	1000	85	140	1.2	1450	1500	0.35	*9 12 17 18*	20014	
88HF100	1000	85	140	1.2	1450	1500	0.35	*9 12 17*	20014	R8
88HF120	1200	85	140	1.2	1450	1500	0.35	*9 12 17*	20014	
85HF120	1200	85	140	1.2	1450	1500	0.35	*9 12 17 18*	20014	R7
85HF140	1400	85	110	1.2	1450	1500	0.35	*9 12 17 18*	20014	
85HF160	1600	85	110	1.2	1450	1500	0.35	*9 12 17 18*	20014	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Standard Recovery

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM}@ I_{FM} (V)	I_{FM} (A)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\Theta JC}$ °C/W	Notes	Fax-on-Demand	Outline
DO-205AA (DO-8)											
150K5A	50	150	150	1.33	470	3000	3140	0.25	*9 12 17 18 19*	20088	**R9**
150K10A	100	150	150	1.33	470	3000	3140	0.25	*9 12 17 18 19*	20088	
150K20A	200	150	150	1.33	470	3000	3140	0.25	*9 12 17 18 19*	20088	
150K30A	300	150	150	1.33	470	3000	3140	0.25	*9 12 17 18 19*	20088	
150K40A	400	150	150	1.33	470	3000	3140	0.25	*9 12 17 18 19*	20088	
150K60A	600	150	150	1.33	470	3000	3140	0.25	*9 12 17 18 19*	20088	
150K80A	800	150	150	1.33	470	3000	3140	0.25	*9 12 17 18 19*	20088	
150K100A	1000	150	150	1.33	470	3000	3140	0.25	*9 12 17 18 19*	20088	
1N3288A	100	100	130	1.5	314	2200	2300	0.4	*12 17 20 21*	20016	
1N3289A	200	100	130	1.5	314	2200	2300	0.4	*12 17 20 21*	20016	
1N3290A	300	100	130	1.5	314	2200	2300	0.4	*12 17 20 21*	20016	
1N3291A	400	100	130	1.5	314	2200	2300	0.4	*12 17 20 21*	20016	
1N3292B	500	100	130	1.5	314	2200	2300	0.4	*12 17 20 21*	20016	
1N3293A	600	100	130	1.5	314	2200	2300	0.4	*12 17 20 21*	20016	
1N3294A	800	100	130	1.5	314	2200	2300	0.4	*12 17 20 21*	20016	
1N3295A	1000	100	130	1.5	314	2200	2300	0.4	*12 17 20 21*	20016	
B-42											
150KS5	50	150	150	1.33	470	3000	3140	0.25	*9 12 17*	20088	**R10**
150KS10	100	150	150	1.33	470	3000	3140	0.25	*9 12 17*	20088	
150KS20	200	150	150	1.33	470	3000	3140	0.25	*9 12 17*	20088	
150KS40	400	150	150	1.33	470	3000	3140	0.25	*9 12 17*	20088	
150KS60	600	150	150	1.33	470	3000	3140	0.25	*9 12 17*	20088	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM} @ I_{FM} (V)	(I_{FM} (A))	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\theta JC}$ °C/W	Notes	Fax-on-Demand	Outline
Standard Recovery											
150KS80	800	150	150	1.33	470	3000	3140	0.25	*9 12 17*	20088	R10
150KS100	1000	150	150	1.33	470	3000	3140	0.25	*9 12 17*	20088	
									DO-205AC (DO-30) 		
130HF40PV	400	130	125	1.5	500	1680	1760	0.3	*9 12 17*	82019	R16
130HF80PV	800	130	125	1.5	500	1680	1760	0.3	*9 12 17*	82019	
130HF120PV	1200	130	125	1.5	500	1680	1760	0.3	*9 12 17*	82019	
									DO-205AA (DO-8) 		
150L5A	50	150	150	1.33	470	3000	3140	0.25	*9 12 18 19*	20088	R17
150L10A	100	150	150	1.33	470	3000	3140	0.25	*9 12 18 19*	20088	
150L20A	200	150	150	1.33	470	3000	3140	0.25	*9 12 18 19*	20088	
150L40A	400	150	150	1.33	470	3000	3140	0.25	*9 12 18 19*	20088	
150L60A	600	150	150	1.33	470	3000	3140	0.25	*9 12 18 19*	20088	
150L80A	800	150	150	1.33	470	3000	3140	0.25	*9 12 18 19*	20088	
150L100A	1000	150	150	1.33	470	3000	3140	0.25	*9 12 18 19*	20088	
1N3111	50	150	150	1.2	470	2850	3000	0.25	*5 12*	20089	
1N3085	100	150	150	1.2	470	2850	3000	0.25	*5 12*	20089	
1N3086	200	150	150	1.2	470	2850	3000	0.25	*5 12*	20089	
1N3087	300	150	150	1.2	470	2850	3000	0.25	*5 12*	20089	
1N3088	400	150	150	1.2	470	2850	3000	0.25	*5 12*	20089	
1N3089	500	150	150	1.2	470	2850	3000	0.25	*5 12*	20089	
1N3090	600	150	150	1.2	470	2850	3000	0.25	*5 12*	20089	
1N3091	800	150	150	1.2	470	2850	3000	0.25	*5 12*	20089	
1N3092	1000	150	150	1.2	470	2850	3000	0.25	*5 12*	20089	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM} @ I_{FM} (V)	(I_{FM} A)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\theta JC}$ °C/W	Notes	Fax-on-Demand	Outline
Standard Recovery											
45L10	100	150	150	1.33	470	3000	3140	0.25	*9 12 18*	20088	R17
45L20	200	150	150	1.33	470	3000	3140	0.25	*9 12 18*	20088	
45L40	400	150	150	1.33	470	3000	3140	0.25	*9 12 18*	20088	
45L60	600	150	150	1.33	470	3000	3140	0.25	*9 12 18*	20088	
45L80	800	150	150	1.33	470	3000	3140	0.25	*9 12 18*	20088	
45L100	1000	150	150	1.33	470	3000	3140	0.25	*9 12 18*	20088	
									DO-205AA (DO-8)		
45L120D	1200	150	150	1.33	470	3000	3140	0.25	*2 4 6*	20088	R18
45L160D	1600	150	150	1.33	470	3000	3140	0.25	*2 4 6*	20088	
									DO-205AC (DO-30)		
SD150N20PC	2000	150	125	1.5	470	3000	3170	0.23	*5 12 18 19*	82077	R12
SD150N25PC	2500	150	125	1.5	470	3000	3170	0.23	*5 12 18 19*	82077	
									DO-205AC (DO-30)		
200HF40PV	400	200	125	1.45	628	3700	3870	0.17	*5 12 17 18*	82020	R16
200HF80PV	800	200	125	1.45	628	3700	3870	0.17	*5 12 17 18*	82020	
200HF120PV	1200	200	125	1.45	628	3700	3870	0.17	*5 12 17 18*	82020	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Standard Recovery

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM} @ I_{FM} (V)	(I_{FM} (A))	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\theta JC}$ °C/W	Notes	Fax-on-Demand	Outline
DO-205AC (DO-30) 											
SD150N04PV	400	150	125	1.5	470	3000	3170	0.23	5 12 18 19	82077	R11
SD150N08PV	800	150	125	1.5	470	3000	3170	0.23	5 12 18 19	82077	
SD150N12PV	1200	150	125	1.5	470	3000	3170	0.23	5 12 18 19	82077	
SD150N16PV	1600	150	125	1.5	470	3000	3170	0.23	5 12 18 19	82077	
SD200N04PV	400	200	110	1.4	630	3950	4140	0.23	5 12 18 19	82080	
SD200N08PV	800	200	110	1.4	630	3950	4140	0.23	5 12 18 19	82080	
SD200N12PV	1200	200	110	1.4	630	3950	4140	0.23	5 12 18 19	82080	
SD200N16PV	1600	200	110	1.4	630	3950	4140	0.23	5 12 18 19	82080	
DO-205AC (DO-30) 											
SD200N20PC	2000	200	110	1.4	630	3950	4140	0.23	5 12 18 19	82080	R12
SD200N24PC	2400	200	110	1.4	630	3950	4140	0.23	5 12 18 19	82080	
DO-205AB (DO-9) 											
1N2054	50	250	135	1.25	785	4300	4500	0.18	5 12 17	20018	R19
1N2055	100	250	135	1.25	785	4300	4500	0.18	5 12 17	20018	
1N2057	200	250	135	1.25	785	4300	4500	0.18	5 12 17	20018	
1N2059	300	250	135	1.25	785	4300	4500	0.18	5 12 17	20018	
1N2061	400	250	135	1.25	785	4300	4500	0.18	5 12 17	20018	
1N2064	600	250	135	1.25	785	4300	4500	0.18	5 12 17	20018	
1N2066	800	250	135	1.25	785	4300	4500	0.18	5 12 17	20018	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM} @ I_{FM} (V)	I_{FM} (A)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\theta JC}$ °C/W	Notes	Fax-on-Demand	Outline
Standard Recovery											
1N2067	900	250	135	1.25	785	4300	4500	0.18	*5 12 17*	20018	R19
1N2068	1000	250	135	1.25	785	4300	4500	0.18	*5 12 17*	20018	
1N3735	100	250	130	1.3	785	4300	4500	0.18	*5 12 17*	20018	
1N3736	200	250	130	1.3	785	4300	4500	0.18	*5 12 17*	20018	
1N3737	300	250	130	1.3	785	4300	4500	0.18	*5 12 17*	20018	
1N3738	400	250	130	1.3	785	4300	4500	0.18	*5 12 17*	20018	
1N3739	500	250	130	1.3	785	4300	4500	0.18	*5 12 17*	20018	
1N3740	600	250	130	1.3	785	4300	4500	0.18	*5 12 17*	20018	
1N3741	800	250	130	1.3	785	4300	4500	0.18	*5 12 17*	20018	
1N3742	1000	250	130	1.3	785	4300	4500	0.18	*5 12 17*	20018	
1N3743	1200	250	130	1.3	785	4300	4500	0.18	*5 12 17*	20018	
									DO-205AB (DO-9)		
70U120D	1200	250	145	1.3	785	5500	5750	0.18	*9 12 17 18*	82031	R20
70U160D	1600	250	145	1.3	785	5500	5750	0.18	*9 12 17 18*	82031	
									DO-205AB (DO-9)		
1N4044	50	275	120	1.35	865	4800	5000	0.18	*5 12 17*	20091	R19
1N4045	100	275	120	1.35	865	4800	5000	0.18	*5 12 17*	20091	
1N4046	150	275	120	1.35	865	4800	5000	0.18	*5 12 17*	20091	
1N4047	200	275	120	1.35	865	4800	5000	0.18	*5 12 17*	20091	
1N4048	250	275	120	1.35	865	4800	5000	0.18	*5 12 17*	20091	
1N4049	300	275	120	1.35	865	4800	5000	0.18	*5 12 17*	20091	
1N4050	400	275	120	1.35	865	4800	5000	0.18	*5 12 17*	20091	
1N4051	500	275	120	1.35	865	4800	5000	0.18	*5 12 17*	20091	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM} @ I_{FM} (V)	I_{FM} (A)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\Theta JC}$ °C/W	Notes	Fax-on-Demand	Outline
Standard Recovery											
1N4052	600	275	120	1.35	865	4800	5000	0.18	5 12 17	20091	R19
1N4053	700	275	120	1.35	865	4800	5000	0.18	5 12 17	20091	
1N4054	800	275	120	1.35	865	4800	5000	0.18	5 12 17	20091	
1N4055	900	275	120	1.35	865	4800	5000	0.18	5 12 17	20091	
1N4056	1000	275	120	1.35	865	4800	5000	0.18	5 12 17	20091	
									DO-205AB (DO-9)		
300HF40P	400	300	125	1.38	942	3800	4000	0.12	9 12 17 18	82021	R21
300HF80P	800	300	125	1.38	942	3800	4000	0.12	9 12 17 18	82021	
300HF120P	1200	300	125	1.38	942	3800	4000	0.12	9 12 17 18	82021	
									DO-205AB (DO-9)		
300U10A	100	300	130	1.4	942	5500	5750	0.18	9 12 17 18	82031	R19
300U20A	200	300	130	1.4	942	5500	5750	0.18	9 12 17 18	82031	
300U40A	400	300	130	1.4	942	5500	5750	0.18	9 12 17 18	82031	
300U60A	600	300	130	1.4	942	5500	5750	0.18	9 12 17 18	82031	
300U80A	800	300	130	1.4	942	5500	5750	0.18	9 12 17 18	82031	
300U100A	1000	300	130	1.4	942	5500	5750	0.18	9 12 17 18	82031	
300U120AD	1200	300	130	1.4	942	5500	5750	0.18	9 12 17 18	82031	
300U160AD	1600	300	130	1.4	942	5500	5750	0.18	9 12 17 18	82031	
70U10	100	250	145	1.3	785	5500	5750	0.18	9 12 17 18	82031	
70U20	200	250	145	1.3	785	5500	5750	0.18	9 12 17 18	82031	
70U40	400	250	145	1.3	785	5500	5750	0.18	9 12 17 18	82031	
70U60	600	250	145	1.3	785	5500	5750	0.18	9 12 17 18	82031	
70U80	800	250	145	1.3	785	5500	5750	0.18	9 12 17 18	82031	

NOTES:

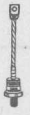
1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM} @ I_{FM} (V)	I_{FM} (A)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\Theta JC}$ °C/W	Notes	Fax-on-Demand	Outline
Standard Recovery											
70U100	1000	250	145	1.3	785	5500	5750	0.18	*9 12 17 18*	82031	R19
									DO-205AB (DO-9) 		
301U80	800	330	120	1.22	942	6940	7270	0.15	*5 12 17 22*	82032	R22
301U120	1200	330	120	1.22	942	6940	7270	0.15	*5 12 17 22*	82032	
301U160	1600	330	120	1.22	942	6940	7270	0.15	*5 12 17 22*	82032	
301U200	2000	330	120	1.22	942	6940	7270	0.15	*5 12 17 22*	82032	
301U250	2500	300	120	1.46	942	5090	5330	0.15	*5 12 17 22*	82032	
									DO-205AB (DO-9) 		
SD300N20PC	2000	380	100	1.83	1180	5090	5330	0.11	*5 12 16 18*	82081	R23
SD300N25PC	2500	380	70	1.83	1180	5090	5330	0.11	*5 12 16 18*	82081	
SD300N28PC	2800	380	70	1.83	1180	5090	5330	0.11	*5 12 16 18*	82081	
SD300N32PC	3200	380	70	1.83	1180	5090	5330	0.11	*5 12 16 18*	82081	
									DO-205AB (DO-9) 		
SD300N04PV	400	380	100	1.83	1180	5090	5330	0.11	*5 12 16 18*	82081	R24
SD300N08PV	800	380	100	1.83	1180	5090	5330	0.11	*5 12 16 18*	82081	
SD300N12PV	1200	380	100	1.83	1180	5090	5330	0.11	*5 12 16 18*	82081	
SD300N16PV	1600	380	100	1.83	1180	5090	5330	0.11	*5 12 16 18*	82081	
SD400N20PC	2000	400	120	1.62	1500	6940	7270	0.11	*5 12 16 18*	82082	R23
SD400N24PC	2400	400	120	1.62	1500	6940	7270	0.11	*5 12 16 18*	82082	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Standard Recovery

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM}@ I_{FM} (V)	I_{FM} (A)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\Theta JC}$ °C/W	Notes	Fax-on-Demand	Outline
DO-205AB (DO-9) 											
SD400N04PV	400	400	120	1.62	1500	6940	7270	0.11	*5 12 16 18*	82082	R24
SD400N08PV	800	400	120	1.62	1500	6940	7270	0.11	*5 12 16 18*	82082	
SD400N12PV	1200	400	120	1.62	1500	6940	7270	0.11	*5 12 16 18*	82082	
SD400N16PV	1600	400	120	1.62	1500	6940	7270	0.11	*5 12 16 18*	82082	
B-8 											
SD500N30PC	3000	475	55	1.66	1000	6310	6600	0.1	*5 12 16 18*	82095	R25
SD500N36PC	3600	475	55	1.66	1000	6310	6600	0.1	*5 12 16 18*	82095	
SD500N40PC	4000	475	55	1.66	1000	6310	6600	0.1	*5 12 16 18*	82095	
SD500N45PC	4500	475	55	1.66	1000	6310	6600	0.1	*5 12 16 18*	82095	
SD600N04PC	400	600	92	1.31	1500	10900	11450	0.1	*5 12 16 18*	82070	
SD600N08PC	800	600	92	1.31	1500	10900	11450	0.1	*5 12 16 18*	82070	
SD600N12PC	1200	600	92	1.31	1500	10900	11450	0.1	*5 12 16 18*	82070	
SD600N16PC	1600	600	92	1.31	1500	10900	11450	0.1	*5 12 16 18*	82070	
SD600N20PC	2000	600	92	1.31	1500	10900	11450	0.1	*5 12 16 18*	82070	
SD600N25PC	2500	600	54	1.44	1500	8830	9250	0.1	*5 12 16 18*	82070	
SD600N28PC	2800	600	54	1.44	1500	8830	9250	0.1	*5 12 16 18*	82070	
SD600N32PC	3200	600	54	1.44	1500	8830	9250	0.1	*5 12 16 18*	82070	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Standard Recovery

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_{HS} (°C)	V_{FM} @ I_{FM} (V)	(I_{FM} A)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\Theta J\text{-}HS}$ °C/W	Notes	Fax-on-Demand	Outline
DO-200AA (A-Puk) 											
SD300C25C	2500	540	55	2.08	1500	5090	5330	0.073	5 12 23	82083	R26
SD300C28C	2800	540	55	2.08	1500	5090	5330	0.073	5 12 23	82083	
SD300C32C	3200	540	55	2.08	1500	5090	5330	0.073	5 12 23	82083	
SD300C04C	400	650	55	2.08	1500	5090	5330	0.073	5 12 23	82083	
SD300C08C	800	650	55	2.08	1500	5090	5330	0.073	5 12 23	82083	
SD300C12C	1200	650	55	2.08	1500	5090	5330	0.073	5 12 23	82083	
SD300C16C	1600	650	55	2.08	1500	5090	5330	0.073	5 12 23	82083	
SD300C20C	2000	650	55	2.08	1500	5090	5330	0.073	5 12 23	82083	
SD400C04C	400	800	55	1.86	1930	6940	7265	0.073	5 12 23	82084	
SD400C08C	800	800	55	1.86	1930	6940	7265	0.073	5 12 23	82084	
SD400C12C	1200	800	55	1.86	1930	6940	7265	0.073	5 12 23	82084	
SD400C16C	1600	800	55	1.86	1930	6940	7265	0.073	5 12 23	82084	
SD400C20C	2000	800	55	1.86	1930	6940	7265	0.073	5 12 23	82084	
SD400C24C	2400	800	55	1.86	1930	6940	7265	0.073	5 12 23	82084	
B-43 (E-Puk) 											
SD1100C25C	2500	1100	55	1.44	1500	8830	9250	0.038	5 12 23	82072	R27
SD1100C30C	3000	1100	55	1.44	1500	8830	9250	0.038	5 12 23	82072	
SD1100C32C	3200	1100	55	1.44	1500	8830	9250	0.038	5 12 23	82072	
SD1100C04C	400	1400	55	1.31	1500	10930	11450	0.038	5 12 23	82072	
SD1100C08C	800	1400	55	1.31	1500	10930	11450	0.038	5 12 23	82072	
SD1100C12C	1200	1400	55	1.31	1500	10930	11450	0.038	5 12 23	82072	
SD1100C16C	1600	1400	55	1.31	1500	10930	11450	0.038	5 12 23	82072	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_{HS} (°C)	V_{FM} @ I_{FM} (V)	(I_{FM}) (A)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\Theta J\text{-}HS}$ °C/W	Notes	Fax-on-Demand	Outline
Standard Recovery											
SD1100C20C	2000	1400	55	1.31	1500	10930	11450	0.038	*5 12 23*	82072	**R27**
									DO-200AB (B-Puk)		
SD700C30L	3000	700	55	1.66	1000	6310	6600	0.05	*5 12 23 25*	82096	**R28**
SD700C36L	3600	700	55	1.66	1000	6310	6600	0.05	*5 12 23 25*	82096	
SD700C40L	4000	700	55	1.66	1000	6310	6600	0.05	*5 12 23 25*	82096	
SD700C45L	4500	700	55	1.66	1000	6310	6600	0.05	*5 12 23 25*	82096	
SD1100C25L	2500	910	55	1.44	1500	8830	9250	0.05	*5 12 23*	82073	
SD1100C30L	3000	910	55	1.44	1500	8830	9250	0.05	*5 12 23*	82073	
SD1100C32L	3200	910	55	1.44	1500	8830	9250	0.05	*5 12 23*	82073	
SD800C40L	4000	1065	55	1.95	2000	10250	10750	0.031	*3 4 5*	82085	
SD800C45L	4500	1065	55	1.95	2000	10250	10750	0.031	*3 4 5*	82085	
SD1100C04L	400	1170	55	1.31	1500	10930	11450	0.05	*5 12 23*	82073	
SD1100C08L	800	1170	55	1.31	1500	10930	11450	0.05	*5 12 23*	82073	
SD1100C12L	1200	1170	55	1.31	1500	10930	11450	0.05	*5 12 23*	82073	
SD1100C16L	1600	1170	55	1.31	1500	10930	11450	0.05	*5 12 23*	82073	
SD1100C20L	2000	1170	55	1.31	1500	10930	11450	0.05	*5 12 23*	82073	
SD800C24L	2400	1180	55	1.66	2000	11440	11980	0.031	*3 4 5*	82085	
SD800C30L	3000	1180	55	1.66	2000	11440	11980	0.031	*3 4 5*	82085	
SD800C36L	3600	1180	55	1.66	2000	11440	11980	0.031	*3 4 5*	82085	
SD1500C04L	400	1600	55	1.64	3000	14000	14700	0.031	*5 12 23*	82086	
SD1500C08L	800	1600	55	1.64	3000	14000	14700	0.031	*5 12 23*	82086	
SD1500C12L	1200	1600	55	1.64	3000	14000	14700	0.031	*5 12 23*	82086	
SD1500C16L	1600	1600	55	1.64	3000	14000	14700	0.031	*5 12 23*	82086	
SD1500C20L	2000	1600	55	1.64	3000	14000	14700	0.031	*5 12 23*	82086	
SD1500C25L	2500	1600	55	1.64	3000	14000	14700	0.031	*5 12 23*	82086	
SD1500C30L	3000	1600	55	1.64	3000	14000	14700	0.031	*5 12 23*	82086	
SD2000C04L	400	2100	55	1.55	6000	20100	21000	0.031	*5 12 23*	82088	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_{HS} (°C)	V_{FM} @ I_{FM} (V)	(I_{FM} A)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\theta J\text{-}HS}$ °C/W	Notes	Fax-on-Demand	Outline
Standard Recovery											
SD2000C08L	800	2100	55	1.55	6000	20100	21000	0.031	5 12 23	82088	R28
SD2000C10L	1000	2100	55	1.55	6000	20100	21000	0.031	5 12 23	82088	
DO-200AC (K-Puk) 											
SD1700C40K	4000	1875	55	2.11	4000	16800	17600	0.02	5 12 23 25	82087	R29
SD1700C45K	4500	1875	55	2.11	4000	16800	17600	0.02	5 12 23 25	82087	
SD1700C24K	2400	2080	55	1.81	4000	20200	21150	0.02	5 12 23 25	82087	
SD1700C30K	3000	2080	55	1.81	4000	20200	21150	0.02	5 12 23 25	82087	
SD1700C36K	3600	2080	55	1.81	4000	20200	21150	0.02	5 12 23 25	82087	
SD2500C12K	1200	3000	55	1.41	4000	26050	27300	0.02	5 12 23	82089	
SD2500C16K	1600	3000	55	1.41	4000	26050	27300	0.02	5 12 23	82089	
SD2500C20K	2000	3000	55	1.41	4000	26050	27300	0.02	5 12 23	82089	
SD2500C25K	2500	3000	55	1.41	4000	26050	27300	0.02	5 12 23	82089	
SD3000C04K	400	3800	55	1.22	6000	30100	31500	0.02	5 12 23	82090	
SD3000C08K	800	3800	55	1.22	6000	30100	31500	0.02	5 12 23	82090	
SD3000C10K	1000	3800	55	1.22	6000	30100	31500	0.02	5 12 23	82090	
B-44 (R-Puk) 											
SD4000C30R	3000	4450	55	1.44	6000	48200	50470	0.01	5 12 23	82033	R30
SD4000C34R	3400	4450	55	1.44	6000	48200	50470	0.01	5 12 23	82033	
SD4000C38R	3800	4450	55	1.44	6000	48200	50470	0.01	5 12 23	82033	
SD4000C40R	4000	4450	55	1.44	6000	48200	50470	0.01	5 12 23	82033	
SD5000C20R	2000	5570	55	1.32	8000	57000	59700	0.01	5 12 23	82034	
SD5000C24R	2400	5570	55	1.32	8000	57000	59700	0.01	5 12 23	82034	
SD5000C26R	2600	5570	55	1.32	8000	57000	59700	0.01	5 12 23	82034	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_{HS} (°C)	V_{FM} @ I_{FM} (V)	I_{FM} (A)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\theta J\text{-}HS}$ °C/W	Notes	Fax-on-Demand	Outline
Standard Recovery											
SD5000C30R	3000	5570	55	1.32	8000	57000	59700	0.01	5 12 23	82034	R30
SD6000C12R	1200	6690	55	1.22	9000	64250	67280	0.01	5 12 23	82035	
SD6000C16R	1600	6690	55	1.22	9000	64250	67280	0.01	5 12 23	82035	
SD6000C20R	2000	6690	55	1.22	9000	64250	67280	0.01	5 12 23	82035	
SD6000C25R	2500	6690	55	1.22	9000	64250	67280	0.01	5 12 23	82035	
SD8500C04R	400	9570	55	0.97	10000	80300	84100	0.01	5 12 23	82035	
SD8500C06R	600	9570	55	0.97	10000	80300	84100	0.01	5 12 23	82035	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Avalanche

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM} @ π X $I_{F(AV)}$ (V)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\theta JC(DC)}$ °C/W	P_R °C/W	Notes	Fax-on-Demand	Outline
DO-203AA (DO-4) 											
A6F40	400	6	158	1.1	134	141	2.5	4	9 12 17 18	20009	R6
A6F60	600	6	158	1.1	134	141	2.5	4	9 12 17 18	20009	
A6F80	800	6	158	1.1	134	141	2.5	4	9 12 17 18	20009	
A6F100	1000	6	158	1.1	134	141	2.5	4	9 12 17 18	20009	
A6F120	1200	6	158	1.1	134	141	2.5	4	9 12 17 18	20009	
A12F40	400	12	144	1.26	225	235	2	7	9 12 17 18	20009	
A12F60	600	12	144	1.26	225	235	2	7	9 12 17 18	20009	
A12F80	800	12	144	1.26	225	235	2	7	9 12 17 18	20009	
A12F100	1000	12	144	1.26	225	235	2	7	9 12 17 18	20009	
A12F120	1200	12	144	1.26	225	235	2	7	9 12 17 18	20009	
A16F40	400	16	140	1.23	295	310	1.6	15	9 12 17 18	20009	
A16F60	600	16	140	1.23	295	310	1.6	15	9 12 17 18	20009	
A16F80	800	16	140	1.23	295	310	1.6	15	9 12 17 18	20009	
A16F100	1000	16	140	1.23	295	310	1.6	15	9 12 17 18	20009	
A16F120	1200	16	140	1.23	295	310	1.6	15	9 12 17 18	20009	
A25F40	400	25	120	0.9	300	314	1.5	10	12 17	82018	
A25F60	600	25	120	0.9	300	314	1.5	10	12 17	82018	
A25F80	800	25	120	0.9	300	314	1.5	10	12 17	82018	
A25F100	1000	25	120	0.9	300	314	1.5	10	12 17	82018	
A25F120	1200	25	120	0.9	300	314	1.5	10	12 17	82018	
DO-203AB (DO-5) 											
40HA40	400	40	140	1.3	480	500	1	* 11	9 12 17 18	20014	R7

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM}@ π X $I_{F(AV)}$ (V)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\Theta JC(DC)}$ °C/W	P_R °C/W	Notes	Fax-on-Demand	Outline
Avalanche											
40HA60	600	40	140	1.3	480	500	1	11	9 12 17 18	20014	R7
40HA80	800	40	140	1.3	480	500	1	11	9 12 17 18	20014	
40HA100	1000	40	140	1.3	480	500	1	11	9 12 17 18	20014	
40HA120	1200	40	110	1.3	480	500	1	11	9 12 17 18	20014	
40HA140	1400	40	110	1.3	480	500	1	11	9 12 17 18	20014	
40HA160	1600	40	110	1.3	480	500	1	11	9 12 17 18	20014	
70HA40	400	70	140	1.35	1000	1050	0.45	20	9 12 17 18	20014	
70HA60	600	70	140	1.35	1000	1050	0.45	20	9 12 17 18	20014	
70HA80	800	70	140	1.35	1000	1050	0.45	20	9 12 17 18	20014	
70HA100	1000	70	140	1.35	1000	1050	0.45	20	9 12 17 18	20014	
70HA120	1200	70	110	1.35	1000	1050	0.45	20	9 12 17 18	20014	
70HA140	1400	70	110	1.35	1000	1050	0.45	20	9 12 17 18	20014	
70HA160	1600	70	110	1.35	1000	1050	0.45	20	9 12 17 18	20014	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Power Module

Diode

T-MODULE

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM} @ π X $I_{F(AV)}$ (V)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\theta JC}$ (DC) K/W	Notes	Fax-on-Demand	Outline
T40HF10	100	40	85	1.3	480	500	1.36	2 8 9 27	20094	M3
T40HF20	200	40	85	1.3	480	500	1.36	2 8 9 27	20094	
T40HF40	400	40	85	1.3	480	500	1.36	2 8 9 27	20094	
T40HF60	600	40	85	1.3	480	500	1.36	2 8 9 27	20094	
T40HF80	800	40	85	1.3	480	500	1.36	2 8 9 27	20094	
T40HF100	1000	40	85	1.3	480	500	1.36	2 8 9 27	20094	
T40HF120	1200	40	85	1.3	480	500	1.36	2 8 9 27	20094	
T40HF140	1400	40	85	1.3	480	500	1.36	2 8 9 27	20094	
T40HF160	1600	40	85	1.3	480	500	1.36	2 8 9 27	20094	
T70HF10	100	70	85	1.35	1000	1050	0.69	2 8 9 27	20094	
T70HF20	200	70	85	1.35	1000	1050	0.69	2 8 9 27	20094	
T70HF40	400	70	85	1.35	1000	1050	0.69	2 8 9 27	20094	
T70HF60	600	70	85	1.35	1000	1050	0.69	2 8 9 27	20094	
T70HF80	800	70	85	1.35	1000	1050	0.69	2 8 9 27	20094	
T70HF100	1000	70	85	1.35	1000	1050	0.69	2 8 9 27	20094	
T70HF120	1200	70	85	1.35	1000	1050	0.69	2 8 9 27	20094	
T70HF140	1400	70	85	1.35	1000	1050	0.69	2 8 9 27	20094	
T70HF160	1600	70	85	1.35	1000	1050	0.69	2 8 9 27	20094	
T85HF10	100	85	85	1.27	1450	1500	0.62	2 8 9 27	20094	
T85HF20	200	85	85	1.27	1450	1500	0.62	2 8 9 27	20094	
T85HF40	400	85	85	1.27	1450	1500	0.62	2 8 9 27	20094	
T85HF60	600	85	85	1.27	1450	1500	0.62	2 8 9 27	20094	
T85HF80	800	85	85	1.27	1450	1500	0.62	2 8 9 27	20094	
T85HF100	1000	85	85	1.27	1450	1500	0.62	2 8 9 27	20094	
T85HF120	1200	85	85	1.27	1450	1500	0.62	2 8 9 27	20094	
T85HF140	1400	85	85	1.27	1450	1500	0.62	2 8 9 27	20094	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Diodes

International
IOR Rectifier

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM} @ π X $I_{F(AV)}$ (V)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\Theta JC}$ (DC) K/W	Notes	Fax-on-Demand	Outline
Power Module										
T85HF160	1600	85	85	1.27	1450	1500	0.62	2 8 9 27	20094	M3
T110HF10	100	110	85	1.35	1700	1780	0.47	2 8 9 27	20094	
T110HF20	200	110	85	1.35	1700	1780	0.47	2 8 9 27	20094	
T110HF40	400	110	85	1.35	1700	1780	0.47	2 8 9 27	20094	
T110HF60	600	110	85	1.35	1700	1780	0.47	2 8 9 27	20094	
T110HF80	800	110	85	1.35	1700	1780	0.47	2 8 9 27	20094	
T110HF100	1000	110	85	1.35	1700	1780	0.47	2 8 9 27	20094	
T110HF120	1200	110	85	1.35	1700	1780	0.47	2 8 9 27	20094	
T110HF140	1400	110	85	1.35	1700	1780	0.47	2 8 9 27	20094	
T110HF160	1600	110	85	1.35	1700	1780	0.47	2 8 9 27	20094	
Diode								Add-A-Pak		
IRKE56/04	400	60	100	1.51	1350	1420	0.5	2 8 9 27	27140	M4
IRKE56/06	600	60	100	1.51	1350	1420	0.5	2 8 9 27	27140	
IRKE56/08	800	60	100	1.51	1350	1420	0.5	2 8 9 27	27140	
IRKE56/10	1000	60	100	1.51	1350	1420	0.5	2 8 9 27	27140	
IRKE56/12	1200	60	100	1.51	1350	1420	0.5	2 8 9 27	27140	
IRKE56/14	1400	60	100	1.51	1350	1420	0.5	2 8 9 27	27140	
IRKE56/16	1600	60	100	1.51	1350	1420	0.5	2 8 9 27	27140	
IRKE71/04	400	80	100	1.5	1500	1570	0.4	2 8 9 27	27140	
IRKE71/06	600	80	100	1.5	1500	1570	0.4	2 8 9 27	27140	
IRKE71/08	800	80	100	1.5	1500	1570	0.4	2 8 9 27	27140	
IRKE71/10	1000	80	100	1.5	1500	1570	0.4	2 8 9 27	27140	
IRKE71/12	1200	80	100	1.5	1500	1570	0.4	2 8 9 27	27140	
IRKE71/14	1400	80	100	1.5	1500	1570	0.4	2 8 9 27	27140	
IRKE71/16	1600	80	100	1.5	1500	1570	0.4	2 8 9 27	27140	
IRKE91/04	400	100	100	1.45	1700	1780	0.35	2 8 9 27	27141	
IRKE91/06	600	100	100	1.45	1700	1780	0.35	2 8 9 27	27141	

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Diodes

International
IOR Rectifier

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM} @ π X $I_{F(AV)}$ (V)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\Theta JC}$ (DC) K/W	Notes	Fax-on-Demand	Outline
Power Module										
IRKE91/08	800	100	100	1.45	1700	1780	0.35	2 8 9 27	27141	M4
IRKE91/10	1000	100	100	1.45	1700	1780	0.35	2 8 9 27	27141	
IRKE91/12	1200	100	100	1.45	1700	1780	0.35	2 8 9 27	27141	
IRKE91/14	1400	100	100	1.45	1700	1780	0.35	2 8 9 27	27141	
IRKE91/16	1600	100	100	1.45	1700	1780	0.35	2 8 9 27	27141	
Diode								INT-A-Pak		
IRKE166-04	400	165	100	1.69	3350	3500	0.2	2 8 9 28 29	87096	M5
IRKE166-08	800	165	100	1.69	3350	3500	0.2	2 8 9 28 29	87096	
IRKE166-12	1200	165	100	1.69	3350	3500	0.2	2 8 9 28 29	87096	
IRKE166-16	1600	165	100	1.69	3350	3500	0.2	2 8 9 28 29	87096	
IRKE166-20	2000	165	100	1.69	3350	3500	0.2	2 8 9 28 29	87096	
IRKE196-04	400	195	100	1.38	4000	4200	0.2	2 8 9 28 29	87096	
IRKE196-08	800	195	100	1.38	4000	4200	0.2	2 8 9 28 29	87096	
IRKE196-12	1200	195	100	1.38	4000	4200	0.2	2 8 9 28 29	87096	
IRKE196-16	1600	195	100	1.38	4000	4200	0.2	2 8 9 28 29	87096	
IRKE196-20	2000	195	100	1.38	4000	4200	0.2	2 8 9 28 29	87096	
IRKE236-04	400	230	100	1.27	5500	5700	0.17	2 8 9 28 29	87096	
IRKE236-08	800	230	100	1.27	5500	5700	0.17	2 8 9 28 29	87096	
IRKE236-12	1200	230	100	1.27	5500	5700	0.17	2 8 9 28 29	87096	
IRKE236-16	1600	230	100	1.27	5500	5700	0.17	2 8 9 28 29	87096	
IRKE236-20	2000	230	100	1.27	5500	5700	0.17	2 8 9 28 29	87096	
IRKE236-24	2400	230	100	1.27	5500	5700	0.17	2 8 9 28 29	87096	
Diode								MAGN-A-Pak		
IRKE250-04	400	250	100	1.29	5900	6180	0.16	2 8 9 29	87090	M6

NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

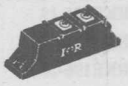
Diodes

International
IOR Rectifier

Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM} @ π X $I_{F(AV)}$ (V)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\theta JC}$ (DC) K/W	Notes	Fax-on-Demand	Outline
Power Module										
IRKE250-08	800	250	100	1.29	5900	6180	0.16	2 8 9 29	87090	M6
IRKE250-12	1200	250	100	1.29	5900	6180	0.16	2 8 9 29	87090	
IRKE250-16	1600	250	100	1.29	5900	6180	0.16	2 8 9 29	87090	
IRKE250-20	2000	250	100	1.29	5900	6180	0.16	2 8 9 29	87090	
IRKE270-04	400	270	100	1.48	7500	7850	0.125	2 8 9 29	87090	
IRKE270-08	800	270	100	1.48	7500	7850	0.125	2 8 9 29	87090	
IRKE270-12	1200	270	100	1.48	7500	7850	0.125	2 8 9 29	87090	
IRKE270-16	1600	270	100	1.48	7500	7850	0.125	2 8 9 29	87090	
IRKE270-20	2000	270	100	1.48	7500	7850	0.125	2 8 9 29	87090	
IRKE270-24	2400	270	100	1.48	7500	7850	0.125	2 8 9 29	87090	
IRKE270-30	3000	270	100	1.48	7500	7850	0.125	2 8 9 29	87090	
IRKE320-04	400	320	100	1.28	8500	8900	0.125	2 8 9 29	87090	
IRKE320-08	800	320	100	1.28	8500	8900	0.125	2 8 9 29	87090	
IRKE320-12	1200	320	100	1.28	8500	8900	0.125	2 8 9 29	87090	
IRKE320-16	1600	320	100	1.28	8500	8900	0.125	2 8 9 29	87090	
IRKE320-20	2000	320	100	1.28	8500	8900	0.125	2 8 9 29	87090	

Diode / Diode

Add-A-Pak



IRKD56/04	IRKC56/04	IRKJ56/04	400	60	100	1.51	1350	1420	0.25	2 8 9 27	27140	M4
IRKD56/06	IRKC56/06	IRKJ56/06	600	60	100	1.51	1350	1420	0.25	2 8 9 27	27140	
IRKD56/08	IRKC56/08	IRKJ56/08	800	60	100	1.51	1350	1420	0.25	2 8 9 27	27140	
IRKD56/10	IRKC56/10	IRKJ56/10	1000	60	100	1.51	1350	1420	0.25	2 8 9 27	27140	
IRKD56/12	IRKC56/12	IRKJ56/12	1200	60	100	1.51	1350	1420	0.25	2 8 9 27	27140	
IRKD56/14	IRKC56/14	IRKJ56/14	1400	60	100	1.51	1350	1420	0.25	2 8 9 27	27140	
IRKD56/16	IRKC56/16	IRKJ56/16	1600	60	100	1.51	1350	1420	0.25	2 8 9 27	27140	
IRKD71/04	IRKC71/04	IRKJ71/04	400	80	100	1.5	1500	1570	0.2	2 8 9 27	27140	
IRKD71/06	IRKC71/06	IRKJ71/06	600	80	100	1.5	1500	1570	0.2	2 8 9 27	27140	
IRKD71/08	IRKC71/08	IRKJ71/08	800	80	100	1.5	1500	1570	0.2	2 8 9 27	27140	

NOTES:

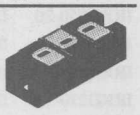
1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Diodes

International
IOR Rectifier

Part Number	Center tap common cathode	Center tap common anode	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM} @ π X $I_{F(AV)}$ (V)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\Theta JC}$ (DC) K/W	Notes	Fax-on-Demand	Outline
Power Module												
IRKD71/10	IRKC71/10	IRKJ71/10	1000	80	100	1.5	1500	1570	0.2	2 8 9 27	27140	M4
IRKD71/12	IRKC71/12	IRKJ71/12	1200	80	100	1.5	1500	1570	0.2	2 8 9 27	27140	
IRKD71/14	IRKC71/14	IRKJ71/14	1400	80	100	1.5	1500	1570	0.2	2 8 9 27	27140	
IRKD71/16	IRKC71/16	IRKJ71/16	1600	80	100	1.5	1500	1570	0.2	2 8 9 27	27140	
IRKD91/04	IRKC91/04	IRKJ91/04	400	100	100	1.45	1700	1780	0.175	2 8 9 27	27141	
IRKD91/06	IRKC91/06	IRKJ91/06	600	100	100	1.45	1700	1780	0.175	2 8 9 27	27141	
IRKD91/08	IRKC91/08	IRKJ91/08	800	100	100	1.45	1700	1780	0.175	2 8 9 27	27141	
IRKD91/10	IRKC91/10	IRKJ91/10	1000	100	100	1.45	1700	1780	0.175	2 8 9 27	27141	
IRKD91/12	IRKC91/12	IRKJ91/12	1200	100	100	1.45	1700	1780	0.175	2 8 9 27	27141	
IRKD91/14	IRKC91/14	IRKJ91/14	1400	100	100	1.45	1700	1780	0.175	2 8 9 27	27141	
IRKD91/16	IRKC91/16	IRKJ91/16	1600	100	100	1.45	1700	1780	0.175	2 8 9 27	27141	
Diode / Diode												
IRKD166-04	IRKC166-04	IRKJ166-04	400	165	100	1.69	3350	3500	0.1	2 8 9 28 29	87096	M5
IRKD166-08	IRKC166-08	IRKJ166-08	800	165	100	1.69	3350	3500	0.1	2 8 9 28 29	87096	
IRKD166-12	IRKC166-12	IRKJ166-12	1200	165	100	1.69	3350	3500	0.1	2 8 9 28 29	87096	
IRKD166-16	IRKC166-16	IRKJ166-16	1600	165	100	1.69	3350	3500	0.1	2 8 9 28 29	87096	
IRKD166-20	IRKC166-20	IRKJ166-20	2000	165	100	1.69	3350	3500	0.1	2 8 9 28 29	87096	
IRKD196-04	IRKC196-04	IRKJ196-04	400	195	100	1.38	4000	4200	0.1	2 8 9 28 29	87096	
IRKD196-08	IRKC196-08	IRKJ196-08	800	195	100	1.38	4000	4200	0.1	2 8 9 28 29	87096	
IRKD196-12	IRKC196-12	IRKJ196-12	1200	195	100	1.38	4000	4200	0.1	2 8 9 28 29	87096	
IRKD196-16	IRKC196-16	IRKJ196-16	1600	195	100	1.38	4000	4200	0.1	2 8 9 28 29	87096	
IRKD196-20	IRKC196-20	IRKJ196-20	2000	195	100	1.38	4000	4200	0.1	2 8 9 28 29	87096	
IRKD196-24	IRKC196-24	IRKJ196-24	2400	195	100	1.38	4000	4200	0.1	2 8 9 28 29	87096	
IRKD236-04	IRKC236-04	IRKJ236-04	400	230	100	1.27	5500	5700	0.085	2 8 9 28 29	87096	
IRKD236-08	IRKC236-08	IRKJ236-08	800	230	100	1.27	5500	5700	0.085	2 8 9 28 29	87096	
IRKD236-12	IRKC236-12	IRKJ236-12	1200	230	100	1.27	5500	5700	0.085	2 8 9 28 29	87096	
IRKD236-16	IRKC236-16	IRKJ236-16	1600	230	100	1.27	5500	5700	0.085	2 8 9 28 29	87096	

INT-A-Pak



NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Diodes

International
IOR Rectifier

Part Number	Center tap common cathode	Center tap common anode	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM} @ π X $I_{F(AV)}$ (V)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\Theta JC}$ (DC) K/W	Notes	Fax-on-Demand	Outline
Power Module												
IRKD236-20	IRKC236-20	IRKJ236-20	2000	230	100	1.27	5500	5700	0.085	2 8 9 28 29	87096	M5
IRKD236-22	IRKC236-22	IRKJ236-22	2200	230	100	1.27	5500	5700	0.085	2 8 9 28 29	87096	
IRKD236-24	IRKC236-24	IRKJ236-24	2400	230	100	1.27	5500	5700	0.085	2 8 9 28 29	87096	
Diode / Diode										MAGN-A-Pak		
IRKD250-04	IRKC250-04	IRKJ250-04	400	250	100	1.29	5900	6180	0.08	2 8 9 29	87090	M6
IRKD250-08	IRKC250-08	IRKJ250-08	800	250	100	1.29	5900	6180	0.08	2 8 9 29	87090	
IRKD250-12	IRKC250-12	IRKJ250-12	1200	250	100	1.29	5900	6180	0.08	2 8 9 29	87090	
IRKD250-16	IRKC250-16	IRKJ250-16	1600	250	100	1.29	5900	6180	0.08	2 8 9 29	87090	
IRKD250-20	IRKC250-20	IRKJ250-20	2000	250	100	1.29	5900	6180	0.08	2 8 9 29	87090	
IRKD270-04	IRKC270-04	IRKJ270-04	400	270	100	1.48	7500	7850	0.063	2 8 9 29	87090	
IRKD270-08	IRKC270-08	IRKJ270-08	800	270	100	1.48	7500	7850	0.063	2 8 9 29	87090	
IRKD270-12	IRKC270-12	IRKJ270-12	1200	270	100	1.48	7500	7850	0.063	2 8 9 29	87090	
IRKD270-16	IRKC270-16	IRKJ270-16	1600	270	100	1.48	7500	7850	0.063	2 8 9 29	87090	
IRKD270-20	IRKC270-20	IRKJ270-20	2000	270	100	1.48	7500	7850	0.063	2 8 9 29	87090	
IRKD270-24	IRKC270-24	IRKJ270-24	2400	270	100	1.48	7500	7850	0.063	2 8 9 29	87090	
IRKD270-30	IRKC270-30	IRKJ270-30	3000	270	100	1.48	7500	7850	0.063	2 8 9 29	87090	
IRKD320-04	IRKC320-04	IRKJ320-04	400	320	100	1.28	8500	8900	0.063	2 8 9 29	87090	
IRKD320-08	IRKC320-08	IRKJ320-08	800	320	100	1.28	8500	8900	0.063	2 8 9 29	87090	
IRKD320-12	IRKC320-12	IRKJ320-12	1200	320	100	1.28	8500	8900	0.063	2 8 9 29	87090	
IRKD320-16	IRKC320-16	IRKJ320-16	1600	320	100	1.28	8500	8900	0.063	2 8 9 29	87090	
IRKD320-20	IRKC320-20	IRKJ320-20	2000	320	100	1.28	8500	8900	0.063	2 8 9 29	87090	

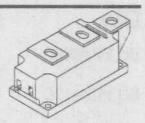
NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Power Module

Diode / Diode

Super MAGN-A-Pak



Part Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	@T_C (°C)	V_{FM}@ I_{FM} (V)	I_{FSM} 50 Hz (A)	I_{FSM} 60 Hz (A)	$R_{\Theta JC}$ (DC) K/W	Notes	Fax-on-Demand	Outline
IRKD600-08	800	600	100	1.25	16200	17200	0.032	2 8 9 29		M7
IRKD600-12	1200	600	100	1.25	16200	17200	0.032	2 8 9 29		M7
IRKD600-16	1600	600	100	1.25	16200	17200	0.032	2 8 9 29		M7
IRKD600-20	2000	600	100	1.25	16200	17200	0.032	2 8 9 29		M7

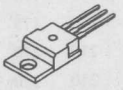
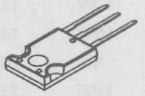
NOTES:

1 Available on tape-and-reel
2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=150°C
3 For Irm: Tj = 150°C
4 Available with 3mm and 5mm cropped leads. To specify, add suffix 'L3' for 3mm or 'L5' for 5mm, e.g. 1KAB10EL3.
5 VFM measured at Tj=Tj max.
6 Io at ambient temperature
7 Rth is junction-to-ambient
8 Value given for RthJC is per module
9 Vfm measured at Tj=25°C
10 RMS isolation voltage=2700V - 50Hz
11 RMS isolation voltage=4000V - 50Hz
12 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
13 Additional packages available
14 Available leaded. To order, add 1 (or 2 for leaded and sleeved) to second digit of part number, e.g. 41HF10 or 42HF10
15 For Irm: Tj=25°C
16 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (i.e. 8AF4RPP, SD600R08PC)
17 Cathode to stud. To order anode to stud, append 'R' to part letters, e.g. 12FR100
18 Available with metric stud. To order, add 'M' to part number, e.g. 6F10M, SD600N08MC
19 Available with stud top case or flag terminal. To order, add 2 for stud top case or 4 for flag terminal to second digit of part number, e.g. 152L5A.
20 1N3288 series also available.
21 VFM for JEDEC types is registered at max Tj.
22 Available with strengthening cone for high-g applications. To order, change part number from 301 to 305.3
23 DC operation, double side cooled
24 IF(AV) and Rth measured to heat sink
25 Ifsm measured at 50% VRRM reapplied
26 10 µs square pulse, Tj=Tj max
27 RMS isolation voltage=3500V - 50Hz
28 Available with spacers and longer screws
29 RMS isolation voltage=3000V - 50Hz

Die

Part Number	Side Dimension (inches)	$I_{T(AV)}$ (A)	V_{RRM} (V)	Anode metalization	Cathode metalization	Quantity per Carrier	Equivalent Finished Product(s)	
IR135DM08C	0.135x0.100	8	800	Aluminum	Silver	360	8EWS08	
IR135DM12C	0.135x0.100	8	1200	Aluminum	Silver	360	8EWS12	
IR180DM08C	0.180	20	800	Aluminum	Silver	256	20ETS08	
IR180DM12C	0.180	20	1200	Aluminum	Silver	256	20ETS12	
IR230DM08C	0.230	40	800	Aluminum	Silver	196	40EPS08	
IR230DM12C	0.230	40	1200	Aluminum	Silver	196	40EPS12	
IR340DM08C	0.350x0.230	60	800	Aluminum	Silver	100	60EPS08	
IR340DM12C	0.350x0.230	60	1200	Aluminum	Silver	100	60EPS12	
IR350DM08C	0.350	70	800	Aluminum	Silver	100	IRKD56/08	IRKE56/08
IR350DM12C	0.350	70	1200	Aluminum	Silver	100	IRKD56/12	IRKE56/12
IR390DM08C	0.390x0.270	80	800	Aluminum	Silver	49	80EPS08S	
IR390DM12C	0.390x0.270	80	1200	Aluminum	Silver	49	80EPS12S	
IR480DM08C	0.480	90	800	Aluminum	Silver	49	IRKD91/08	IRKE91/08
IR480DM12C	0.480	90	1200	Aluminum	Silver	49	IRKD91/12	IRKE91/12

Plastic-Pack Thyristors in D² Pak, TO-220 and TO-247 packages

	16A$_{RMS}$ 25A$_{RMS}$ 		16A$_{RMS}$ 25A$_{RMS}$ 		55A$_{RMS}$ 
Voltage Grade	D^{2}Pak		TO-220		TO-247
800	16TTS08S	25TTS08S	16TTS08	25TTS08	40TPS08
1200	16TTS12S	25TTS12S	16TTS12	25TTS12	40TPS12
1600	16TTS16S	25TTS16S	16TTS16	25TTS16	40TPS16

Phase Control SCR

International
IOR Rectifier

Thyristors

Part Number	V_{RRM} V_{DRM} (V)	$I_{T(RMS)}$ (A)	$I_{T(AV)}$ @T C (A)	(°C)	I_{TSM} 50 Hz (A)	60 Hz (A)	V_{GT} (V)	I_{GT} (mA)	V_{TM} @ I_{TM} (V)	(A)	dv/dt (V/µs)	R_{Θ} (°C/W)	Notes	Fax-on-Demand	Outline
D²Pak															
16TTS08S	800	16	10	98	170	175	2	45	1.4	10	500	1.3	*1*	82115	H6
16TTS12S	1200	16	10	98	170	175	2	45	1.4	10	500	1.3	*1*	82115	
16TTS16S	1600	16	10	98	170	175	2	45	1.4	10	500	1.3	*1*	82115	
25TTS08S	800	25	16	94	210	220	2	45	1.25	16	500	1.1	*1*	82117	
25TTS12S	1200	25	16	94	210	220	2	45	1.25	16	500	1.1	*1*	82117	
25TTS16S	1600	25	16	94	210	220	2	45	1.25	16	500	1.1	*1*	82117	
TO-220AC															
16TTS08	800	16	10	98	170	175	2	45	1.4	10	500	1.3		82115	H12
16TTS12	1200	16	10	98	170	175	2	45	1.4	10	500	1.3		82115	
16TTS16	1600	16	10	98	170	175	2	45	1.4	10	500	1.3		82115	
25TTS08	800	25	16	94	210	220	2	45	1.25	16	500	1.1		82117	
25TTS012	1200	25	16	94	210	220	2	45	1.25	16	500	1.1		82117	
25TTS16	1600	25	16	94	210	220	2	45	1.25	16	500	1.1		82117	
TO-247AC (TO-3P)															
40TPS08	800	55	35	85	335	350	2.5	150	1.43	40	500	0.6		82107	H13
40TPS12	1200	55	35	85	335	350	2.5	150	1.43	40	500	0.6		82107	
40TPS16	1600	55	35	85	335	350	2.5	150	1.43	40	500	0.6		82107	

NOTES

1 Available on tape-and-reel. Refer to case outline.
2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C
3 For Igt, Vgt: Tj = 25°C
4 Vtm @ pi X It(AV), Tj=125°C
5 dv/dt exponential to 0.67 VDRM. Tj=25°C
6 Available with metric stud. To order, add 'M' to part number, e.g.10RIA10M.
7 dv/ dt linear to 0.8 Vdrm; Tj = 125°C
8 dv/dt exponential to 100% VDRM; Tj = 125°C
9 Vtm measured at Tj=Tj max
10 Max Tj = 150°C
11 Available with fast-on terminals. To order, change last '0 to '1' in part number, e.g. ST180S04P1V
12 Available with fast-on terminals. To order, change first '0 to '1' in part number, e.g. 81RIA40
13 Available with flag terminals. To order, change first '0' to '2' in part number, e.g. 82RIA40
14 DC operation, double side cooled

Phase Control SCR

International
IOR Rectifier

Thyristors

TO-208AA (TO-48)

Part Number	V_{RRM} V_{DRM} (V)	$I_{T(RMS)}$ (A)	$I_{T(AV)}$ (A)	@ T_C (°C)	I_{TSM} 50 Hz (A)	I_{TSM} 60 Hz (A)	V_{GT} (V)	I_{GT} (mA)	V_{TM} (V)	@ I_{TM} (A)	dv/dt (V/µs)	$R_{\Theta JC}$ (DC) (°C/W)	Notes	Fax-on-Demand	Outline
10RIA10	100	25	10	85	190	200	2	60	1.75		300	1.85	2 3 4 5 6	30060	T1
10RIA20	200	25	10	85	190	200	2	60	1.75		300	1.85	2 3 4 5 6	30060	
10RIA40	400	25	10	85	190	200	2	60	1.75		300	1.85	2 3 4 5 6	30060	
10RIA60	600	25	10	85	190	200	2	60	1.75		300	1.85	2 3 4 5 6	30060	
10RIA80	800	25	10	85	190	200	2	60	1.75		300	1.85	2 3 4 5 6	30060	
10RIA100	1000	25	10	85	190	200	2	60	1.75		300	1.85	2 3 4 5 6	30060	
10RIA120	1200	25	10	85	190	200	2	60	1.75		300	1.85	2 3 4 5 6	30060	
2N681	25	25	16	65	145	150	2	40	2		250	1.5	2 3 4 5	30081	
2N682	50	25	16	65	145	150	2	40	2		250	1.5	2 3 4 5	30081	
2N683	100	25	16	65	145	150	2	40	2		250	1.5	2 3 4 5	30081	
16RIA10	100	35	16	85	285	300	2	60	1.75		300	1.15	2 3 4 5 6	30060	
2N684	150	25	16	65	145	150	2	40	2		250	1.5	2 3 4 5	30081	
2N685	200	25	16	65	145	150	2	40	2		250	1.5	2 3 4 5	30081	
16RIA20	200	35	16	85	285	300	2	60	1.75		300	1.15	2 3 4 5 6	30060	
2N686	250	25	16	65	145	150	2	40	2		250	1.5	2 3 4 5	30081	
2N687	300	25	16	65	145	150	2	40	2		250	1.5	2 3 4 5	30081	
2N688	400	25	16	65	145	150	2	40	2		250	1.5	2 3 4 5	30081	
16RIA40	400	35	16	85	285	300	2	60	1.75		300	1.15	2 3 4 5 6	30060	
2N689	500	25	16	65	145	150	2	40	2		250	1.5	2 3 4 5	30081	
16RIA60	600	35	16	85	285	300	2	60	1.75		300	1.15	2 3 4 5 6	30060	
2N690	600	25	16	65	145	150	2	40	2		250	1.5	2 3 4 5	30081	
2N691	700	25	16	65	145	150	2	40	2		250	1.5	2 3 4 5	30081	
16RIA80	800	35	16	85	285	300	2	60	1.75		300	1.15	2 3 4 5 6	30060	
2N692	800	25	16	65	145	150	2	40	2		250	1.5	2 3 4 5	30081	
16RIA100	1000	35	16	85	285	300	2	60	1.75		300	1.15	2 3 4 5 6	30060	
16RIA120	1200	35	16	85	285	300	2	60	1.75		300	1.15	2 3 4 5 6	30060	
16RIA140	1400	35	16	80	190	200	2	60	1.8		300	1.15	2 3 4 5 6	30060	
16RIA160	1600	35	16	80	190	200	2	60	1.8		300	1.15	2 3 4 5 6	30060	
22RIA10	100	35	22	85	335	355	2	60	1.7		300	0.86	2 3 4 5 6	30060	
22RIA20	200	35	22	85	335	355	2	60	1.7		300	0.86	2 3 4 5 6	30060	
22RIA40	400	35	22	85	335	355	2	60	1.7		300	0.86	2 3 4 5 6	30060	

NOTES

1 Available on tape-and-reel. Refer to case outline.
2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C
3 For Igt, Vgt: Tj = 25°C
4 Vtm @ pi X It(AV), Tj=125°C
5 dv/dt exponential to 0.67 VDRM. Tj=25°C
6 Available with metric stud. To order, add 'M' to part number, e.g.10RIA10M.
7 dv/ dt linear to 0.8 Vdrm; Tj = 125°C
8 dv/dt exponential to 100% VDRM; Tj = 125°C
9 Vtm measured at Tj=Tj max
10 Max Tj = 150°C
11 Available with fast-on terminals. To order, change last '0 to '1' in part number, e.g. ST180S04P1V
12 Available with fast-on terminals. To order, change first '0 to '1' in part number, e.g. 81RIA40
13 Available with flag terminals. To order, change first '0' to '2' in part number, e.g. 82RIA40
14 DC operation, double side cooled

Phase Control SCR

International
IOR Rectifier

Thyristors

Part Number	V_{RRM} V_{DRM} (V)	$I_{T(RMS)}$ (A)	$I_{T(AV)}$ @ T_C (A)	(T_C °C)	I_{TSM} 50 Hz (A)	I_{TSM} 60 Hz (A)	V_{GT} (V)	I_{GT} (mA)	V_{TM} @ I_{TM} (V)	(I_{TM} A)	dv/dt (V/µs)	$R_{\Theta JC}$ (DC) (°C/W)	Notes	Fax-on-Demand	Outline
22RIA60	600	35	22	85	335	355	2	60	1.7		300	0.86	2 3 4 5 6	30060	T1
2N5204	600	35	22	40	285	300	2	40	2.3		250	1.5	2 3 4 5	30081	
2N5205	800	35	22	40	285	300	2	40	2.3		250	1.5	2 3 4 5	30081	
22RIA80	800	35	22	85	335	355	2	60	1.7		300	0.86	2 3 4 5 6	30060	
2N5206	1000	35	22	40	285	300	2	40	2.3		250	1.5	2 3 4 5	30081	
22RIA100	1000	35	22	85	335	355	2	60	1.7		300	0.86	2 3 4 5 6	30060	
2N5207	1200	35	22	40	285	300	2	40	2.3		250	1.5	2 3 4 5	30081	
22RIA120	1200	35	22	85	335	355	2	60	1.7		300	0.86	2 3 4 5 6	30060	
22RIA140	1400	35	22	80	285	300	2	60	1.8		300	0.86	2 3 4 5 6	30060	
22RIA160	1600	35	22	80	285	300	2	60	1.8		300	0.86	2 3 4 5 6	30060	
25RIA10	100	40	25	85	350	370	2	60	1.7		300	0.75	2 3 4 5 6	30060	
25RIA20	200	40	25	85	350	370	2	60	1.7		300	0.75	2 3 4 5 6	30060	
25RIA40	400	40	25	85	350	370	2	60	1.7		300	0.75	2 3 4 5 6	30060	
25RIA60	600	40	25	85	350	370	2	60	1.7		300	0.75	2 3 4 5 6	30060	
25RIA80	800	40	25	85	350	370	2	60	1.7		300	0.75	2 3 4 5 6	30060	
25RIA100	1000	40	25	85	350	370	2	60	1.7		300	0.75	2 3 4 5 6	30060	
25RIA120	1200	40	25	85	350	370	2	60	1.7		300	0.75	2 3 4 5 6	30060	
25RIA140	1400	40	25	80	335	350	2	60	1.8		300	0.75	2 3 4 5 6	30060	
25RIA160	1600	40	25	80	335	350	2	60	1.8		300	0.75	2 3 4 5 6	30060	
													TO-208AC (TO-65)		
50RIA10	100	80	50	94	1200	1255	2.5	100	1.6		500	0.35	2 3 4 6 15	30062	T2
50RIA20	200	80	50	94	1200	1255	2.5	100	1.6		500	0.35	2 3 4 6 15	30062	
50RIA40	400	80	50	94	1200	1255	2.5	100	1.6		500	0.35	2 3 4 6 15	30062	
50RIA60	600	80	50	94	1200	1255	2.5	100	1.6		500	0.35	2 3 4 6 15	30062	
50RIA80	800	80	50	94	1200	1255	2.5	100	1.6		500	0.35	2 3 4 6 15	30062	
50RIA100	1000	80	50	94	1200	1255	2.5	100	1.6		500	0.35	2 3 4 6 15	30062	
50RIA120	1200	80	50	94	1200	1255	2.5	100	1.6		500	0.35	2 3 4 6 15	30062	
50RIA140	1400	80	50	94	900	942	2.5	100	1.6		500	0.35	2 3 4 6 15	30062	
50RIA160	1600	80	50	94	900	942	2.5	100	1.6		500	0.35	2 3 4 6 15	30062	

NOTES

1 Available on tape-and-reel. Refer to case outline.
2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C
3 For Igt, Vgt: Tj = 25°C
4 Vtm @ pi X It(AV), Tj=125°C
5 dv/dt exponential to 0.67 VDRM. Tj=25°C
6 Available with metric stud. To order, add 'M' to part number, e.g.10RIA10M.
7 dv/ dt linear to 0.8 Vdrm; Tj = 125°C
8 dv/dt exponential to 100% VDRM; Tj = 125°C
9 Vtm measured at Tj=Tj max
10 Max Tj = 150°C
11 Available with fast-on terminals. To order, change last '0 to '1' in part number, e.g. ST180S04P1V
12 Available with fast-on terminals. To order, change first '0 to '1' in part number, e.g. 81RIA40
13 Available with flag terminals. To order, change first '0' to '2' in part number, e.g. 82RIA40
14 DC operation, double side cooled

Thyristors

Part Number	V_{RRM} V_{DRM} (V)	$I_{T(RMS)}$ (A)	$I_{T(AV)}$ (A)	@T_C (°C)	I_{TSM} 50 Hz (A)	I_{TSM} 60 Hz (A)	V_{GT} (V)	I_{GT} (mA)	V_{TM} (V)	@ I_{TM} (A)	dv/dt (V/µs)	$R_{\Theta JC}$ (DC) (°C/W)	Notes	Fax-on-Demand	Outline
TO-208AD (TO-83)															
2N1800	600	110	70	65	955	1000	2.5	70	1.85	220	200	0.4	2 3 4 7 8 9	30082	T3
2N1801	700	110	70	65	955	1000	2.5	70	1.85	220	200	0.4	2 3 4 7 8 9	30082	
2N1802	800	110	70	65	955	1000	2.5	70	1.85	220	200	0.4	2 3 4 7 8 9	30082	
2N1803	900	110	70	65	955	1000	2.5	110	2	220	200	0.4	2 3 4 7 8 9	30082	
2N1804	1000	110	70	65	955	1000	2.5	110	2	220	200	0.4	2 3 4 7 8 9	30082	
TO-209AC (TO-94)															
80RIA40	400	125	80	85	1600	1675	2.5	120	1.4	250	500	0.3	2 3 4 6 7 9 12 13	30085	T4
80RIA80	800	125	80	85	1600	1675	2.5	120	1.4	250	500	0.3	2 3 4 6 7 9 12 13	30085	
80RIA120	1200	125	80	85	1600	1675	2.5	120	1.4	250	500	0.3	2 3 4 6 7 9 12 13	30085	
TO-209AC (TO-94)															
110RKI40	400	172	110	90	1750	1830	2	100	1.5	350	500	0.27	2 3 4 6 7 9 12 13	25152	T6
110RKI80	800	172	110	90	1750	1830	2	100	1.5	350	500	0.27	2 3 4 6 7 9 12 13	25152	
110RKI120	1200	172	110	90	1750	1830	2	100	1.5	350	500	0.27	2 3 4 6 7 9 12 13	25152	
TO-209AC (TO-94)															
ST110S04P0V	400	175	110	90	2270	2380	3	150	1.52	350	500	0.195	2 3 7 10	25167	T5
ST110S08P0V	800	175	110	90	2270	2380	3	150	1.52	350	500	0.195	2 3 7 10	25167	
ST110S12P0V	1200	175	110	90	2270	2380	3	150	1.52	350	500	0.195	2 3 7 10	25167	

NOTES

1 Available on tape-and-reel. Refer to case outline.
2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C
3 For Igt, Vgt: Tj = 25°C
4 Vtm @ pi X It(AV), Tj=125°C
5 dv/dt exponential to 0.67 VDRM. Tj=25°C
6 Available with metric stud. To order, add 'M' to part number, e.g.10RIA10M.
7 dv/ dt linear to 0.8 Vdrm; Tj = 125°C
8 dv/dt exponential to 100% VDRM; Tj = 125°C
9 Vtm measured at Tj=Tj max
10 Max Tj = 150°C
11 Available with fast-on terminals. To order, change last '0 to '1' in part number, e.g. ST180S04P1V
12 Available with fast-on terminals. To order, change first '0 to '1' in part number, e.g. 81RIA40
13 Available with flag terminals. To order, change first '0' to '2' in part number, e.g. 82RIA40
14 DC operation, double side cooled

Phase Control SCR

International
IOR Rectifier

Thyristors

Part Number	V_{RRM} V_{DRM} (V)	$I_{T(RMS)}$ (A)	$I_{T(AV)}$ @ T_C (A)	(°C)	I_{TSM} 50 Hz (A)	60 Hz (A)	V_{GT} (V)	I_{GT} (mA)	V_{TM} @ I_{TM} (V)	(A)	dv/dt (V/µs)	$R_{\Theta JC}$ (DC) (°C/W)	Notes	Fax-on-Demand	Outline
TO-209AC (TO-94) 															
ST110S14P0	1400	175	110	90	2270	2380	3	150	1.52	350	500	0.195	*2 3 7 10*	25167	T7
ST110S16P0	1600	175	110	90	2270	2380	3	150	1.52	350	500	0.195	*2 3 7 10*	25167	
TO-209AB (TO-93) 															
180RKI40	400	285	180	80	3500	3660	2.5	150	1.35	570	500	0.15	*2 3 4 7 9 12 13*	25153	T9
180RKI80	800	285	180	80	3500	3660	2.5	150	1.35	570	500	0.15	*2 3 4 7 9 12 13*	25153	
180RKI100	1000	285	180	80	3500	3660	2.5	150	1.35	570	500	0.15	*2 3 4 7 9 12 13*	25153	
TO-209AB (TO-93) 															
ST180S04P0V	400	314	200	85	4200	4400	3	150	1.75	570	500	0.105	*2 3 4 6 7 9 11*	25165	T8
ST180S08P0V	800	314	200	85	4200	4400	3	150	1.75	570	500	0.105	*2 3 4 6 7 9 11 16*	25165	
ST180S12P0V	1200	314	200	85	4200	4400	3	150	1.75	570	500	0.105	*2 3 4 6 7 9 11 16*	25165	
TO-209AB (TO-93) 															
ST180S16P0	1600	314	200	85	4200	4400	3	150	1.75	570	500	0.105	*2 3 4 6 7 9 11 16*	25165	T10
ST180S18P0	1800	314	200	85	4200	4400	3	150	1.75	570	500	0.105	*2 3 4 6 7 9 11 16*	25165	
ST180S20P0	2000	314	200	85	4200	4400	3	150	1.75	570	500	0.105	*2 3 4 6 7 9 11 16*	25165	

NOTES

1 Available on tape-and-reel. Refer to case outline.
2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C
3 For Igt, Vgt: Tj = 25°C
4 Vtm @ pi X It(AV), Tj=125°C
5 dv/dt exponential to 0.67 VDRM. Tj=25°C
6 Available with metric stud. To order, add 'M' to part number, e.g.10RIA10M.
7 dv/ dt linear to 0.8 Vdrm; Tj = 125°C
8 dv/dt exponential to 100% VDRM; Tj = 125°C
9 Vtm measured at Tj=Tj max
10 Max Tj = 150°C
11 Available with fast-on terminals. To order, change last '0 to '1' in part number, e.g. ST180S04P1V
12 Available with fast-on terminals. To order, change first '0 to '1' in part number, e.g. 81RIA40
13 Available with flag terminals. To order, change first '0' to '2' in part number, e.g. 82RIA40
14 DC operation, double side cooled

Phase Control SCR

International
IOR Rectifier

Thyristors

Part Number	V_{RRM} V_{DRM} (V)	$I_{T(RMS)}$ (A)	$I_{T(AV)}$ @ T_C (A)	($^\circ$C)	I_{TSM} 50 Hz (A)	60 Hz (A)	V_{GT} (V)	I_{GT} (mA)	V_{TM} @ I_{TM} (V)	(A)	dv/dt (V/µs)	$R_{\Theta JC}$ (DC) ($^\circ$C/W)	Notes	Fax-on-Demand	Outline
TO-209AB (TO-93) 															
ST230S04P0V	400	361	230	85	4800	5000	3	150	1.55	720	500	0.1	*2 3 4 6 7 9 11 16*	25163	T8
ST230S08P0V	800	361	230	85	4800	5000	3	150	1.55	720	500	0.1	*2 3 4 6 7 9 11 16*	25163	
ST230S12P0V	1200	361	230	85	4800	5000	3	150	1.55	720	500	0.1	*2 3 4 6 7 9 11 16*	25163	
TO-209AB (TO-93) 															
ST230S14P0	1400	361	230	85	4800	5000	3	150	1.55	720	500	0.1	*2 3 4 6 7 9 11 16*	25163	T10
ST230S16P0	1600	361	230	85	4800	5000	3	150	1.55	720	500	0.1	*2 3 4 6 7 9 11 16*	25163	
TO-209AB (TO-93) 															
ST280S04P0V	400	440	280	85	6600	6900	3	150	1.28	880	500	0.105	*2 3 4 6 7 9 11 16*	25161	T8
ST280S06P0V	600	440	280	85	6600	6900	3	150	1.28	880	500	0.105	*2 3 4 6 7 9 11 16*	25161	
TO-209AE (TO-118) 															
ST300S04P0	400	470	300	75	6730	7040	3	200	1.66	940	500	0.1	*2 3 4 6 7 9 11*	25158	T11
ST300S08P0	800	470	300	75	6730	7040	3	200	1.66	940	500	0.1	*2 3 4 6 7 9 11*	25158	
ST300S12P0	1200	470	300	75	6730	7040	3	200	1.66	940	500	0.1	*2 3 4 6 7 9 11*	25158	
ST300S16P0	1600	470	300	75	6730	7040	3	200	1.66	940	500	0.1	*2 3 4 6 7 9 11*	25158	
ST300S18P0	1800	470	300	75	6730	7040	3	200	1.66	940	500	0.1	*2 3 4 6 7 9 11*	25158	
ST300S20P0	2000	470	300	75	6730	7040	3	200	1.66	940	500	0.1	*2 3 4 6 7 9 11*	25158	
ST330S04P0	400	520	330	75	7570	7920	3	200	1.51	1040	500	0.1	*2 3 4 6 7 9 11*	25156	
ST330S08P0	800	520	330	75	7570	7920	3	200	1.51	1040	500	0.1	*2 3 4 6 7 9 11*	25156	
ST330S12P0	1200	520	330	75	7570	7920	3	200	1.51	1040	500	0.1	*2 3 4 6 7 9 11*	25156	
ST330S14P0	1400	520	330	75	7570	7920	3	200	1.51	1040	500	0.1	*2 3 4 6 7 9 11*	25156	
ST330S16P0	1600	520	330	75	7570	7920	3	200	1.51	1040	500	0.1	*2 3 4 6 7 9 11*	25156	

NOTES

1 Available on tape-and-reel. Refer to case outline.
2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C
3 For Igt, Vgt: Tj = 25°C
4 Vtm @ pi X It(AV), Tj=125°C
5 dv/dt exponential to 0.67 VDRM. Tj=25°C
6 Available with metric stud. To order, add 'M' to part number, e.g.10RIA10M.
7 dv/ dt linear to 0.8 Vdrm; Tj = 125°C
8 dv/dt exponential to 100% VDRM; Tj = 125°C
9 Vtm measured at Tj=Tj max
10 Max Tj = 150°C
11 Available with fast-on terminals. To order, change last '0 to '1' in part number, e.g. ST180S04P1V
12 Available with fast-on terminals. To order, change first '0 to '1' in part number, e.g. 81RIA40
13 Available with flag terminals. To order, change first '0' to '2' in part number, e.g. 82RIA40
14 DC operation, double side cooled

Phase Control SCR

International
IOR Rectifier

Thyristors

TO-200AA (A-Puk)

Part Number	V_{RRM} V_{DRM} (V)	$I_{T(RMS)}$ (A)	$I_{T(AV)}$ (A)	@T_C (°C)	I_{TSM} 50 Hz (A)	I_{TSM} 60 Hz (A)	V_{GT} (V)	I_{GT} (mA)	V_{TM} (V)	@I_{TM} (A)	dv/dt (V/µs)	$R_{\Theta J\text{-}HS}$ (°C/W)	Notes	Fax-on-Demand	Outline
ST180C04C0	400	660	350	55	4200	4400	3	150	1.96	750	500	0.08	2 3 7 9	25164	T12
ST180C08C0	800	660	350	55	4200	4400	3	150	1.96	750	500	0.08	2 3 7 9	25164	
ST180C12C0	1200	660	350	55	4200	4400	3	150	1.96	750	500	0.08	2 3 7 9	25164	
ST180C16C0	1600	660	350	55	4200	4400	3	150	1.96	750	500	0.08	2 3 7 9	25164	
ST180C18C0	1800	660	350	55	4200	4400	3	150	1.96	750	500	0.08	2 3 7 9	25164	
ST180C20C0	2000	660	350	55	4200	4400	3	150	1.96	750	500	0.08	2 3 7 9	25164	
ST230C04C0	400	780	410	55	4800	5000	3	150	1.69	880	500	0.08	2 3 7 9	25162	
ST230C08C0	800	780	410	55	4800	5000	3	150	1.69	880	500	0.08	2 3 7 9	25162	
ST230C12C0	1200	780	410	55	4800	5000	3	150	1.69	880	500	0.08	2 3 7 9	25162	
ST230C14C0	1400	780	410	55	4800	5000	3	150	1.69	880	500	0.08	2 3 7 9	25162	
ST230C16C0	1600	780	410	55	4800	5000	3	150	1.69	880	500	0.08	2 3 7 9	25162	
ST280C04C0	400	960	500	55	6600	6900	3	150	1.36	1050	500	0.08	2 3 7 9	25159	
ST280CH04C0	400	1130	500	80	6000	6300	3	150	1.35	1000	500	0.08	2 3 7 9 10	25160	
ST280C06C0	600	960	500	55	6600	6900	3	150	1.36	1050	500	0.08	2 3 7 9	25159	
ST280CH06C0	600	1130	500	80	6000	6300	3	150	1.35	1000	500	0.08	2 3 7 9 10	25160	

NOTES

1 Available on tape-and-reel. Refer to case outline.
2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C
3 For Igt, Vgt: Tj = 25°C
4 Vtm @ pi X It(AV), Tj=125°C
5 dv/dt exponential to 0.67 VDRM. Tj=25°C
6 Available with metric stud. To order, add 'M' to part number, e.g.10RIA10M.
7 dv/ dt linear to 0.8 Vdrm; Tj = 125°C
8 dv/dt exponential to 100% VDRM; Tj = 125°C
9 Vtm measured at Tj=Tj max
10 Max Tj = 150°C
11 Available with fast-on terminals. To order, change last '0 to '1' in part number, e.g. ST180S04P1V
12 Available with fast-on terminals. To order, change first '0 to '1' in part number, e.g. 81RIA40
13 Available with flag terminals. To order, change first '0' to '2' in part number, e.g. 82RIA40
14 DC operation, double side cooled

Thyristors

TO-200AB (E-Puk)

Part Number	V_{RRM} V_{DRM} (V)	$I_{T(RMS)}$ (A)	$I_{T(AV)}$ (A)	@T_C (°C)	I_{TSM} 50 Hz (A)	I_{TSM} 60 Hz (A)	V_{GT} (V)	I_{GT} (mA)	V_{TM} (V)	@ I_{TM} (A)	dv/dt (V/µs)	$R_{\Theta J\text{-}HS}$ (°C/W)	Notes	Fax-on-Demand	Outline
ST300C04C0	400	1290	650	55	6730	7040	3	200	2.18	1630	500	0.04	*2 3 7 9*	25157	T13
ST300C08C0	800	1290	650	55	6730	7040	3	200	2.18	1630	500	0.04	*2 3 7 9*	25157	
ST300C12C0	1200	1290	650	55	6730	7040	3	200	2.18	1630	500	0.04	*2 3 7 9*	25157	
ST300C16C0	1600	1290	650	55	6730	7040	3	200	2.18	1630	500	0.04	*2 3 7 9*	25157	
ST300C18C0	1800	1290	650	55	6730	7040	3	200	2.18	1630	500	0.04	*2 3 7 9*	25157	
ST300C20C0	2000	1290	650	55	6730	7040	3	200	2.18	1630	500	0.04	*2 3 7 9*	25157	
ST330C04C0	400	1420	720	55	7570	7920	3	200	1.96	1800	500	0.04	*2 3 7 9*	25155	
ST330C08C0	800	1420	720	55	7570	7920	3	200	1.96	1800	500	0.04	*2 3 7 9*	25155	
ST330C12C0	1200	1420	720	55	7570	7920	3	200	1.96	1800	500	0.04	*2 3 7 9*	25155	
ST330C14C0	1400	1420	720	55	7570	7920	3	200	1.96	1800	500	0.04	*2 3 7 9*	25155	
ST330C16C0	1600	1420	720	55	7570	7920	3	200	1.96	1800	500	0.04	*2 3 7 9*	25155	
ST380C04C0	400	1900	960	55	12600	13200	3	200	1.6	3000	500	0.04	*2 3 7 9*	25168	
ST380CH04C0	400	2220	960	80	10500	11000	3	200	1.58	2900	500	0.04	*2 3 7 9 10*	25169	
ST380CH06C0	600	2220	960	80	10500	11000	3	200	1.58	2900	500	0.04	*2 3 7 9 10*	25169	
ST380C06C0	600	1900	960	55	12600	13200	3	200	1.6	3000	500	0.04	*2 3 7 9*	25168	

NOTES

1 Available on tape-and-reel. Refer to case outline.
2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C
3 For Igt, Vgt: Tj = 25°C
4 Vtm @ pi X It(AV), Tj=125°C
5 dv/dt exponential to 0.67 VDRM. Tj=25°C
6 Available with metric stud. To order, add 'M' to part number, e.g.10RIA10M.
7 dv/ dt linear to 0.8 Vdrm; Tj = 125°C
8 dv/dt exponential to 100% VDRM; Tj = 125°C
9 Vtm measured at Tj=Tj max
10 Max Tj = 150°C
11 Available with fast-on terminals. To order, change last '0 to '1' in part number, e.g. ST180S04P1V
12 Available with fast-on terminals. To order, change first '0 to '1' in part number, e.g. 81RIA40
13 Available with flag terminals. To order, change first '0' to '2' in part number, e.g. 82RIA40
14 DC operation, double side cooled

Phase Control SCR

International
IOR Rectifier

Thyristors

TO-200AC (B-Puk)

Part Number	V_{RRM} V_{DRM} (V)	$I_{T(RMS)}$ (A)	$I_{T(AV)}$ (A)	@T_C (°C)	I_{TSM} 50 Hz (A)	I_{TSM} 60 Hz (A)	V_{GT} (V)	I_{GT} (mA)	V_{TM} (V)	@I_{TM} (A)	dv/dt (V/µs)	$R_{\Theta J\text{-}HS}$ (°C/W)	Notes	Fax-on-Demand	Outline
ST300C04L0	400	1115	560	55	6730	7040	3	200	2.18	1635	500	0.05	2 3 7 9	25157	T14
ST300C08L0	800	1115	560	55	6730	7040	3	200	2.18	1635	500	0.05	2 3 7 9	25157	
ST300C12L0	1200	1115	560	55	6730	7040	3	200	2.18	1635	500	0.05	2 3 7 9	25157	
ST300C16L0	1600	1115	560	55	6730	7040	3	200	2.18	1635	500	0.05	2 3 7 9	25157	
ST300C18L0	1800	1115	560	55	6730	7040	3	200	2.18	1635	500	0.05	2 3 7 9	25157	
ST300C20L0	2000	1115	560	55	6730	7040	3	200	2.18	1635	500	0.05	2 3 7 9	25157	
ST330C04L0	400	1230	650	55	7570	7925	3	200	1.9	1730	500	0.05	2 3 7 9	25154	
ST330C08L0	800	1230	650	55	7570	7925	3	200	1.9	1730	500	0.05	2 3 7 9	25154	
ST330C12L0	1200	1230	650	55	7570	7925	3	200	1.9	1730	500	0.05	2 3 7 9	25154	
ST330C14L0	1400	1230	650	55	7570	7925	3	200	1.9	1730	500	0.05	2 3 7 9	25154	
ST330C16L0	1600	1230	650	55	7570	7925	3	200	1.9	1730	500	0.05	2 3 7 9	25154	
ST700C12L0	1200	1857	910	55	13200	13800	3	200	1.8	2000	500	0.031	2 3 7 9	25190	
ST700C16L0	1600	1857	910	55	13200	13800	3	200	1.8	2000	500	0.031	2 3 7 9	25190	
ST700C18L0	1800	1857	910	55	13200	13800	3	200	1.8	2000	500	0.031	2 3 7 9	25190	
ST700C20L0	2000	1857	910	55	13200	13800	3	200	1.8	2000	500	0.031	2 3 7 9	25190	
ST700C22L0	2200	1857	910	55	13200	13800	3	200	1.8	2000	500	0.031	2 3 7 9	25190	
ST730C08L0	800	2000	990	55	15000	15700	3	200	1.62	2000	500	0.031	2 3 7 9	25191	
ST730C12L0	1200	2000	990	55	15000	15700	3	200	1.62	2000	500	0.031	2 3 7 9	25191	
ST730C14L0	1400	2000	990	55	15000	15700	3	200	1.62	2000	500	0.031	2 3 7 9	25191	
ST730C16L0	1600	2000	990	55	15000	15700	3	200	1.62	2000	500	0.031	2 3 7 9	25191	
ST730C18L0	1800	2000	990	55	15000	15700	3	200	1.62	2000	500	0.031	2 3 7 9	25191	
ST780C04L0	400	2700	1350	55	20550	21500	3	200	1.31	3600	500	0.031	2 3 7 9	25192	
ST780C06L0	600	2700	1350	55	20550	21500	3	200	1.31	3600	500	0.031	2 3 7 9	25192	

NOTES

1 Available on tape-and-reel. Refer to case outline.
2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C
3 For Igt, Vgt: Tj = 25°C
4 Vtm @ pi X It(AV), Tj=125°C
5 dv/dt exponential to 0.67 VDRM. Tj=25°C
6 Available with metric stud. To order, add 'M' to part number, e.g.10RIA10M.
7 dv/ dt linear to 0.8 Vdrm; Tj = 125°C
8 dv/dt exponential to 100% VDRM; Tj = 125°C
9 Vtm measured at Tj=Tj max
10 Max Tj = 150°C
11 Available with fast-on terminals. To order, change last '0 to '1' in part number, e.g. ST180S04P1V
12 Available with fast-on terminals. To order, change first '0 to '1' in part number, e.g. 81RIA40
13 Available with flag terminals. To order, change first '0' to '2' in part number, e.g. 82RIA40
14 DC operation, double side cooled

Phase Control SCR

International
IOR Rectifier

Thyristors

A-24 (K-Puk)

Part Number	V_{RRM} V_{DRM} (V)	$I_{T(RMS)}$ (A)	$I_{T(AV)}$ @T C (A)	(°C)	I_{TSM} 50 Hz (A)	60 Hz (A)	V_{GT} (V)	I_{GT} (mA)	V_{TM} @ I_{TM} (V)	(A)	dv/dt (V/µs)	$R_{\Theta JC}$ (D (°C/W)	Notes	Fax-on-Demand	Outline
ST1000C12K0	1200	2800	1470	55	17800	18100	3	200	1.8	3000	500	0.021	*2 3 7 9 11*		T15
ST1000C14K0	1400	2800	1470	55	17800	18100	3	200	1.8	3000	500	0.021	*2 3 7 9 11*		
ST1000C16K0	1600	2800	1470	55	17800	18100	3	200	1.8	3000	500	0.021	*2 3 7 9 11*		
ST1000C18K0	1800	2800	1470	55	17800	18100	3	200	1.8	3000	500	0.021	*2 3 7 9 11*		
ST1000C20K0	2000	2800	1470	55	17800	18100	3	200	1.8	3000	500	0.021	*2 3 7 9 11*		
ST1000C22K0	2200	2800	1470	55	17800	18100	3	200	1.8	3000	500	0.021	*2 3 7 9 11*		
ST1000C24K0	2400	2800	1470	55	17800	18100	3	200	1.8	3000	500	0.021	*2 3 7 9 11*		
ST1000C26K0	2600	2800	1470	55	17800	18100	3	200	1.8	3000	500	0.021	*2 3 7 9 11*		
ST1200C12K0	1200	3080	1650	55	25700	26900	3	200	1.73	4000	500	0.021	*2 3 7 9 11*		25196
ST1200C14K0	1400	3080	1650	55	25700	26900	3	200	1.73	4000	500	0.021	*2 3 7 9 11*		25196
ST1200C16K0	1600	3080	1650	55	25700	26900	3	200	1.73	4000	500	0.021	*2 3 7 9 11*		25196
ST1200C18K0	1800	3080	1650	55	25700	26900	3	200	1.73	4000	500	0.021	*2 3 7 9 11*		25196
ST1200C20K0	2000	3080	1650	55	25700	26900	3	200	1.73	4000	500	0.021	*2 3 7 9 11*		25196
ST1230C08K0	800	3200	1745	55	28000	29500	3	200	1.62	4000	500	0.021	*2 3 7 9 11*		25194
ST1230C12K0	1200	3200	1745	55	28000	29500	3	200	1.62	4000	500	0.021	*2 3 7 9 11*		25194
ST1230C14K0	1400	3200	1745	55	28000	29500	3	200	1.62	4000	500	0.021	*2 3 7 9 11*		25194
ST1230C16K0	1600	3200	1745	55	28000	29500	3	200	1.62	4000	500	0.021	*2 3 7 9 11*		25194
ST1280C04K0	400	4150	2310	55	35700	37400	3	200	1.44	8000	500	0.021	*2 3 7 9 11*		25195
ST1280C06K0	600	4150	2310	55	35700	37400	3	200	1.44	8000	500	0.021	*2 3 7 9 11*		25195

NOTES

1 Available on tape-and-reel. Refer to case outline.
2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C
3 For Igt, Vgt: Tj = 25°C
4 Vtm @ pi X It(AV), Tj=125°C
5 dv/dt exponential to 0.67 VDRM. Tj=25°C
6 Available with metric stud. To order, add 'M' to part number, e.g.10RIA10M.
7 dv/ dt linear to 0.8 Vdrm; Tj = 125°C
8 dv/dt exponential to 100% VDRM; Tj = 125°C
9 Vtm measured at Tj=Tj max
10 Max Tj = 150°C
11 Available with fast-on terminals. To order, change last '0 to '1' in part number, e.g. ST180S04P1V
12 Available with fast-on terminals. To order, change first '0 to '1' in part number, e.g. 81RIA40
13 Available with flag terminals. To order, change first '0' to '2' in part number, e.g. 82RIA40
14 DC operation, double side cooled

Phase Control SCR

International
IOR Rectifier

Thyristors

A-36 (R-Puk)

Part Number	V_{RRM} V_{DRM} (V)	$I_{T(RMS)}$ (A)	$I_{T(AV)}$ @ T_C (A)	(°C)	I_{TSM} 50 Hz (A)	60 Hz (A)	V_{GT} (V)	I_{GT} (mA)	V_{TM} @ I_{TM} (V)	(A)	dv/dt (V/µs)	$R_{\Theta JC}$ (DC) (°C/W)	Notes	Fax-on-Demand	Outline
ST1900C45R0	4500	3500	1625	80	22000	23500	4	400	2.1	2900	500	0.012	2 3 7 11		T16
ST1900C46R0	4600	3500	1625	80	22000	23500	4	400	2.1	2900	500	0.012	2 3 7 11		
ST1900C48R0	4800	3500	1625	80	22000	23500	4	400	2.1	2900	500	0.012	2 3 7 11		
ST1900C50R0	5000	3500	1625	80	22000	23500	4	400	2.1	2900	500	0.012	2 3 7 11		
ST1900C52R0	5200	3500	1625	80	22000	23500	4	400	2.1	2900	500	0.012	2 3 7 11		
ST2100C35R0	3500	3850	1770	80	29000	30350	4	400	1.88	2900	500	0.012	2 3 7 11		
ST2100C36R0	3600	3850	1770	80	29000	30350	4	400	1.88	2900	500	0.012	2 3 7 11		
ST2100C38R0	3800	3850	1770	80	29000	30350	4	400	1.88	2900	500	0.012	2 3 7 11		
ST2100C40R0	4000	3850	1770	80	29000	30350	4	400	1.88	2900	500	0.012	2 3 7 11		
ST2100C42R0	4200	3850	1770	80	29000	30350	4	400	1.88	2900	500	0.012	2 3 7 11		
ST2600C20R0	2000	4800	2220	80	36800	38500	4	400	1.45	2900	500	0.012	2 3 7 11		
ST2600C22R0	2200	4800	2220	80	36800	38500	4	400	1.45	2900	500	0.012	2 3 7 11		
ST2600C24R0	2400	4800	2220	80	36800	38500	4	400	1.45	2900	500	0.012	2 3 7 11		
ST2600C26R0	2600	4800	2220	80	36800	38500	4	400	1.45	2900	500	0.012	2 3 7 11		
ST2600C28R0	2800	4800	2220	80	36800	38500	4	400	1.45	2900	500	0.012	2 3 7 11		
ST2600C30R0	3000	4800	2220	80	36800	38500	4	400	1.45	2900	500	0.012	2 3 7 11		
ST3230C10R0	1000	5950	2785	80	49000	51300	4	400	1.3	2900	500	0.012	2 3 7 11		
ST3230C12R0	1200	5950	2785	80	49000	51300	4	400	1.3	2900	500	0.012	2 3 7 11		
ST3230C14R0	1400	5950	2785	80	49000	51300	4	400	1.3	2900	500	0.012	2 3 7 11		
ST3230C16R0	1600	5950	2785	80	49000	51300	4	400	1.3	2900	500	0.012	2 3 7 11		
ST3230C18R0	1800	5950	2785	80	49000	51300	4	400	1.3	2900	500	0.012	2 3 7 11		

NOTES

1 Available on tape-and-reel. Refer to case outline.
2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C
3 For Igt, Vgt: Tj = 25°C
4 Vtm @ pi X It(AV), Tj=125°C
5 dv/dt exponential to 0.67 VDRM. Tj=25°C
6 Available with metric stud. To order, add 'M' to part number, e.g.10RIA10M.
7 dv/ dt linear to 0.8 Vdrm; Tj = 125°C
8 dv/dt exponential to 100% VDRM; Tj = 125°C
9 Vtm measured at Tj=Tj max
10 Max Tj = 150°C
11 Available with fast-on terminals. To order, change last '0 to '1' in part number, e.g. ST180S04P1V
12 Available with fast-on terminals. To order, change first '0 to '1' in part number, e.g. 81RIA40
13 Available with flag terminals. To order, change first '0' to '2' in part number, e.g. 82RIA40
14 DC operation, double side cooled

Phase Control SCR

International
IOR Rectifier

Thyristor Module

T-MODULE

Part Number	VRRM VDRM (V)	$I_{T(AV)}$ (A)	@T_C (°C)	V_{TM} (V)	I_{TSM} 50 Hz (A)	I_{TSM} 60 Hz (A)	$R_{\Theta JC(DC)}$ (K/W)	Notes	Fax-on-Demand	Outline
T50RIA10	100	50	70	1.6	1100	1150	0.65	2 4 22	87105	M3
T50RIA20	200	50	70	1.6	1100	1150	0.65	2 4 22	87105	
T50RIA40	400	50	70	1.6	1100	1150	0.65	2 4 22	87105	
T50RIA60	600	50	70	1.6	1100	1150	0.65	2 4 22	87105	
T50RIA80	800	50	70	1.6	1100	1150	0.65	2 4 22	87105	
T50RIA100	1000	50	70	1.6	1100	1150	0.65	2 4 22	87105	
T50RIA120	1200	50	70	1.6	1100	1150	0.65	2 4 22	87105	
T70RIA10	100	70	70	1.55	1400	1460	0.5	2 4 22	87105	
T70RIA20	200	70	70	1.55	1400	1460	0.5	2 4 22	87105	
T70RIA40	400	70	70	1.55	1400	1460	0.5	2 4 22	87105	
T70RIA60	600	70	70	1.55	1400	1460	0.5	2 4 22	87105	
T70RIA80	800	70	70	1.55	1400	1460	0.5	2 4 22	87105	
T70RIA100	1000	70	70	1.55	1400	1460	0.5	2 4 22	87105	
T70RIA120	1200	70	70	1.55	1400	1460	0.5	2 4 22	87105	
T90RIA10	100	90	70	1.55	1500	1570	0.38	2 4 22	87105	
T90RIA20	200	90	70	1.55	1500	1570	0.38	2 4 22	87105	
T90RIA40	400	90	70	1.55	1500	1570	0.38	2 4 22	87105	
T90RIA60	600	90	70	1.55	1500	1570	0.38	2 4 22	87105	
T90RIA80	800	90	70	1.55	1500	1570	0.38	2 4 22	87105	
T90RIA100	1000	90	70	1.55	1500	1570	0.38	2 4 22	87105	
T90RIA120	1200	90	70	1.55	1500	1570	0.38	2 4 22	87105	

NOTES:

2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C

4 Vtm @ pi X It(AV), Tj=125°C

15 dv/dt exponential to 0.67; Tj = 125°C

16 Available with flag terminal. To order, change last '0' to '2' in part number, e.g. ST180S04P2V

17 Available without auxiliary cathode. Refer to case outline for details.

18 Available in center tap (circuit common anode or circuit common cathode) configurations. Refer to case outline for details.

19 Available with spacers and longer terminal screws. Refer to case outline for details.

20 RMS isolation voltage = 3000V - 50Hz

21 RMS isolation voltage = 2500V - 50Hz

22 Value given for RthJC is per module.

24 RMS isolation voltage = 4000V - 50Hz

25 RMS isolation voltage = 3500 - 50Hz

Phase Control SCR

International
IOR Rectifier

Thyristor / Thyristor Module

ADD-A-Pak

Part Number	VRRM VDRM (V)	$I_{T(AV)}$ (A)	@T_C (°C)	I_{TSM} 50 Hz (A)	I_{TSM} 60 Hz (A)	$R_{\Theta JC(DC)}$ (K/W)	Notes	Fax-on-Demand	Outline
IRKT26/04	400	27	85	335	350	0.31	2 16 17 22 25	27130	M4
IRKT26/06	600	27	85	335	350	0.31	2 16 17 22 25	27130	
IRKT26/08	800	27	85	335	350	0.31	2 16 17 22 25	27130	
IRKT26/10	1000	27	85	335	350	0.31	2 16 17 22 25	27130	
IRKT26/12	1200	27	85	335	350	0.31	2 16 17 22 25	27130	
IRKT26/14	1400	27	85	335	350	0.31	2 16 17 22 25	27130	
IRKT26/16	1600	27	85	335	350	0.31	2 16 17 22 25	27130	
IRKT41/04	400	45	85	715	750	0.23	2 16 17 18 22 25	27131	
IRKT41/06	600	45	85	715	750	0.23	2 16 17 18 22 25	27131	
IRKT41/08	800	45	85	715	750	0.23	2 16 17 18 22 25	27131	
IRKT41/10	1000	45	85	715	750	0.23	2 16 17 18 22 25	27131	
IRKT41/12	1200	45	85	715	750	0.23	2 16 17 18 22 25	27131	
IRKT41/14	1400	45	85	715	750	0.23	2 16 17 18 22 25	27131	
IRKT41/16	1600	45	85	715	750	0.23	2 16 17 18 22 25	27131	
IRKT56/04	400	60	85	1100	1150	0.2	2 16 17 18 22 25	27131	
IRKT56/06	600	60	85	1100	1150	0.2	2 16 17 18 22 25	27131	
IRKT56/08	800	60	85	1100	1150	0.2	2 16 17 18 22 25	27131	
IRKT56/10	1000	60	85	1100	1150	0.2	2 16 17 18 22 25	27131	
IRKT56/12	1200	60	85	1100	1150	0.2	2 16 17 18 22 25	27131	
IRKT56/14	1400	60	85	1100	1150	0.2	2 16 17 18 22 25	27131	
IRKT56/16	1600	60	85	1100	1150	0.2	2 16 17 18 22 25	27131	
IRKT71/04	400	75	85	1400	1470	0.165	2 16 17 18 22 25	27132	
IRKT71/06	600	75	85	1400	1470	0.165	2 16 17 18 22 25	27132	
IRKT71/08	800	75	85	1400	1470	0.165	2 16 17 18 22 25	27132	
IRKT71/10	1000	75	85	1400	1470	0.165	2 16 17 18 22 25	27132	
IRKT71/12	1200	75	85	1400	1470	0.165	2 16 17 18 22 25	27132	
IRKT71/14	1400	75	85	1400	1470	0.165	2 16 17 18 22 25	27132	
IRKT71/16	1600	75	85	1400	1470	0.165	2 16 17 18 22 25	27132	
IRKT91/04	400	95	85	1500	1570	0.135	2 16 17 18 22 25	27132	
IRKT91/06	600	95	85	1500	1570	0.135	2 16 17 18 22 25	27132	

NOTES:

2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C

4 Vtm @ pi X It(AV), Tj=125°C

15 dv/dt exponential to 0.67; Tj = 125°C

16 Available with flag terminal. To order, change last '0' to '2' in part number, e.g. ST180S04P2V

17 Available without auxiliary cathode. Refer to case outline for details.

18 Available in center tap (circuit common anode or circuit common cathode) configurations. Refer to case outline for details.

19 Available with spacers and longer terminal screws. Refer to case outline for details.

20 RMS isolation voltage = 3000V - 50Hz

21 RMS isolation voltage = 2500V - 50Hz

22 Value given for RthJC is per module.

24 RMS isolation voltage = 4000V - 50Hz

25 RMS isolation voltage = 3500 - 50Hz

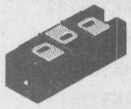
Phase Control SCR

International
IOR Rectifier

Part Number	VRRM VDRM (V)	$I_{T(AV)}$ (A)	@T_C (°C)	I_{TSM} 50 Hz (A)	I_{TSM} 60 Hz (A)	$R_{\Theta JC(DC)}$ (K/W)	Notes	Fax-on-Demand	Outline
IRKT91/08	800	95	85	1500	1570	0.135	2 16 17 18 22 25	27132	M4
IRKT91/10	1000	95	85	1500	1570	0.135	2 16 17 18 22 25	27132	
IRKT91/12	1200	95	85	1500	1570	0.135	2 16 17 18 22 25	27132	
IRKT91/14	1400	95	85	1500	1570	0.135	2 16 17 18 22 25	27132	
IRKT91/16	1600	95	85	1500	1570	0.135	2 16 17 18 22 25	27132	
IRKT105/04	400	105	85	1500	1570	0.135	2 16 17 18 22 25	27133	
IRKT105/06	600	105	85	1500	1570	0.135	2 16 17 18 22 25	27133	
IRKT105/08	800	105	85	1500	1570	0.135	2 16 17 18 22 25	27133	
IRKT105/10	1000	105	85	1500	1570	0.135	2 16 17 18 22 25	27133	
IRKT105/12	1200	105	85	1500	1570	0.135	2 16 17 18 22 25	27133	
IRKT105/14	1400	105	85	1500	1570	0.135	2 16 17 18 22 25	27133	
IRKT105/16	1600	105	85	1500	1570	0.135	2 16 17 18 22 25	27133	

Thyristor / Thyristor Module

INT-A-Pak



IRKT136-04	400	135	85	2700	2800	0.1	2 18 19 20 22	87101	M5
IRKT136-08	800	135	85	2700	2800	0.1	2 18 19 20 22	87101	
IRKT136-12	1200	135	85	2700	2800	0.1	2 18 19 20 22	87101	
IRKT136-14	1400	135	85	2700	2800	0.1	2 18 19 20 22	87101	
IRKT136-16	1600	135	85	2700	2800	0.1	2 18 19 20 22	87101	
IRKT142-08	800	140	85	4000	4200	0.085	2 18 19 20 22	87101	
IRKT142-12	1200	140	85	4000	4200	0.085	2 18 19 20 22	87101	
IRKT142-16	1600	140	85	4000	4200	0.085	2 18 19 20 22	87101	
IRKT142-18	1800	140	85	4000	4200	0.085	2 18 19 20 22	87101	
IRKT142-20	2000	140	85	4000	4200	0.085	2 18 19 20 22	87101	
IRKT162-04	400	160	85	4300	4500	0.085	2 18 19 20 22	87101	
IRKT162-08	800	160	85	4300	4500	0.085	2 18 19 20 22	87101	
IRKT162-12	1200	160	85	4300	4500	0.085	2 18 19 20 22	87101	
IRKT162-14	1400	160	85	4300	4500	0.085	2 18 19 20 22	87101	
IRKT162-16	1600	160	85	4300	4500	0.085	2 18 19 20 22	87101	

NOTES:

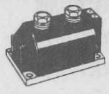
2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C
4 Vtm @ pi X It(AV), Tj=125°C
15 dv/dt exponential to 0.67; Tj = 125°C
16 Available with flag terminal. To order, change last '0' to '2' in part number, e.g. ST180S04P2V
17 Available without auxiliary cathode. Refer to case outline for details.
18 Available in center tap (circuit common anode or circuit common cathode) configurations. Refer to case outline for details.
19 Available with spacers and longer terminal screws. Refer to case outline for details.
20 RMS isolation voltage = 3000V - 50Hz
21 RMS isolation voltage = 2500V - 50Hz
22 Value given for RthJC is per module.
24 RMS isolation voltage = 4000V - 50Hz
25 RMS isolation voltage = 3500 - 50Hz

Phase Control SCR

International
IOR Rectifier

Thyristor / Thyristor Module

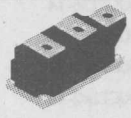
MAGN-A-Pak



Part Number	VRRM VDRM (V)	$I_{T(AV)}$ (A)	@T_C (°C)	I_{TSM} 50 Hz (A)	I_{TSM} 60 Hz (A)	$R_{\Theta JC(DC)}$ (K/W)	Notes	Fax-on-Demand	Outline
IRKT170-04	400	170	85	4300	4500	0.085	2 18 20 22	87102	M6
IRKT170-08	800	170	85	4300	4500	0.085	2 18 20 22	87102	
IRKT170-12	1200	170	85	4300	4500	0.085	2 18 20 22	87102	
IRKT170-14	1400	170	85	4300	4500	0.085	2 18 20 22	87102	
IRKT170-16	1600	170	85	4300	4500	0.085	2 18 20 22	87102	
IRKT230-08	800	230	85	6300	6600	0.063	2 18 20 22	87102	
IRKT230-12	1200	230	85	6300	6600	0.063	2 18 20 22	87102	
IRKT230-16	1600	230	85	6300	6600	0.063	2 18 20 22	87102	
IRKT230-18	1800	230	85	6300	6600	0.063	2 18 20 22	87102	
IRKT230-20	2000	230	85	6300	6600	0.063	2 18 20 22	87102	
IRKT250-04	400	250	85	7150	7500	0.063	2 18 20 22	87102	
IRKT250-08	800	250	85	7150	7500	0.063	2 18 20 22	87102	
IRKT250-12	1200	250	85	7150	7500	0.063	2 18 20 22	87102	
IRKT250-14	1400	250	85	7150	7500	0.063	2 18 20 22	87102	
IRKT250-16	1600	250	85	7150	7500	0.063	2 18 20 22	87102	

Thyristor / Thyristor Module

Super MAGN-A-Pak



IRKT430-16	1600	430	82	13200	13800	0.032	2 20 22		M7
IRKT430-18	1800	430	82	13200	13800	0.032	2 20 22		
IRKT430-20	2000	430	82	13200	13800	0.032	2 20 22		
IRKT500-08	800	500	82	15000	15700	0.032	2 20 22		
IRKT500-12	1200	500	82	15000	15700	0.032	2 20 22		
IRKT500-14	1400	500	82	15000	15700	0.032	2 20 22		
IRKT500-16	1600	500	82	15000	15700	0.032	2 20 22		

NOTES:

2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C

4 Vtm @ pi X It(AV), Tj=125°C

15 dv/dt exponential to 0.67; Tj = 125°C

16 Available with flag terminal. To order, change last '0' to '2' in part number, e.g. ST180S04P2V

17 Available without auxiliary cathode. Refer to case outline for details.

18 Available in center tap (circuit common anode or circuit common cathode) configurations. Refer to case outline for details.

19 Available with spacers and longer terminal screws. Refer to case outline for details.

20 RMS isolation voltage = 3000V - 50Hz

21 RMS isolation voltage = 2500V - 50Hz

22 Value given for RthJC is per module.

24 RMS isolation voltage = 4000V - 50Hz

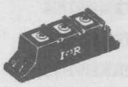
25 RMS isolation voltage = 3500 - 50Hz

Phase Control SCR

International
IOR Rectifier

Thyristor / Diode

ADD-A-Pak



Part Number Doubler Circuit Positive Control	Part Number Doubler Circuit Negative Control	Voltage Range Thyristor (V)	Diode (V)	$I_{T(AV)}$ (A)	@T_C (°C)	I_{TSM} 50 Hz (A)	60 Hz (A)	$R_{\theta JC(DC)}$ (K/W)	Notes	Fax-on-Demand	Outline
IRKH26/04	IRKL26/04	400		27	85	335	350	0.31	2 16 17 22 25	27130	M4
IRKH26/06	IRKL26/06	600		27	85	335	350	0.31	2 16 17 22 25	27130	
IRKH26/08	IRKL26/08	800		27	85	335	350	0.31	2 16 17 22 25	27130	
IRKH26/10	IRKL26/10	1000		27	85	335	350	0.31	2 16 17 22 25	27130	
IRKH26/12	IRKL26/12	1200		27	85	335	350	0.31	2 16 17 22 25	27130	
IRKH26/14	IRKL26/14	1400		27	85	335	350	0.31	2 16 17 22 25	27130	
IRKH26/16	IRKL26/16	1600		27	85	335	350	0.31	2 16 17 22 25	27130	
IRKH41/04	IRKL41/04	400		45	85	715	750	0.23	2 16 17 22 25	27131	
IRKH41/06	IRKL41/06	600		45	85	715	750	0.23	2 16 17 22 25	27131	
IRKH41/08	IRKL41/08	800		45	85	715	750	0.23	2 16 17 22 25	27131	
IRKH41/10	IRKL41/10	1000		45	85	715	750	0.23	2 16 17 22 25	27131	
IRKH41/12	IRKL41/12	1200		45	85	715	750	0.23	2 16 17 22 25	27131	
IRKH41/14	IRKL41/14	1400		45	85	715	750	0.23	2 16 17 22 25	27131	
IRKH41/16	IRKL41/16	1600		45	85	715	750	0.23	2 16 17 22 25	27131	
IRKH56/04	IRKL56/04	400		60	85	1100	1150	0.2	2 16 17 22 25	27131	
IRKH56/06	IRKL56/06	600		60	85	1100	1150	0.2	2 16 17 22 25	27131	
IRKH56/08	IRKL56/08	800		60	85	1100	1150	0.2	2 16 17 22 25	27131	
IRKH56/10	IRKL56/10	1000		60	85	1100	1150	0.2	2 16 17 22 25	27131	
IRKH56/12	IRKL56/12	1200		60	85	1100	1150	0.2	2 16 17 22 25	27131	
IRKH56/14	IRKL56/14	1400		60	85	1100	1150	0.2	2 16 17 22 25	27131	
IRKH56/16	IRKL56/16	1600		60	85	1100	1150	0.2	2 16 17 22	27131	
IRKH71/04	IRKL71/04	400		75	85	1400	1470	0.165	2 16 17 22	27132	
IRKH71/06	IRKL71/06	600		75	85	1400	1470	0.165	2 16 17 22	27132	
IRKH71/08	IRKL71/08	800		75	85	1400	1470	0.165	2 16 17 22	27132	
IRKH71/10	IRKL71/10	1000		75	85	1400	1470	0.165	2 16 17 22	27132	
IRKH71/12	IRKL71/12	1200		75	85	1400	1470	0.165	2 16 17 22	27132	
IRKH71/14	IRKL71/14	1400		75	85	1400	1470	0.165	2 16 17 22	27132	
IRKH71/16	IRKL71/16	1600		75	85	1400	1470	0.165	2 16 17 22	27132	
IRKH91/04	IRKL91/04	400		95	85	1500	1570	0.135	2 16 17 22	27132	
IRKH91/06	IRKL91/06	600		95	85	1500	1570	0.135	2 16 17 22	27132	

NOTES:

2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C

4 Vtm @ pi X It(AV), Tj=125°C

15 dv/dt exponential to 0.67; Tj = 125°C

16 Available with flag terminal. To order, change last '0' to '2' in part number, e.g. ST180S04P2V

17 Available without auxiliary cathode. Refer to case outline for details.

18 Available in center tap (circuit common anode or circuit common cathode) configurations. Refer to case outline for details.

19 Available with spacers and longer terminal screws. Refer to case outline for details.

20 RMS isolation voltage = 3000V - 50Hz

21 RMS isolation voltage = 2500V - 50Hz

22 Value given for RthJC is per module.

24 RMS isolation voltage = 4000V - 50Hz

25 RMS isolation voltage = 3500 - 50Hz

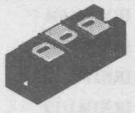
Phase Control SCR

International
IOR Rectifier

Part Number Doubler Circuit Positive Control	Part Number Doubler Circuit Negative Control	Voltage Range Thyristor (V)	Voltage Range Diode (V)	$I_{T(AV)}$ (A)	@T_C (°C)	I_{TSM} 50 Hz (A)	I_{TSM} 60 Hz (A)	$R_{\Theta JC(DC)}$ (K/W)	Notes	Fax-on-Demand	Outline
IRKH91/08	IRKL91/08	800		95	85	1500	1570	0.135	2 16 17 22	27132	M4
IRKH91/10	IRKL91/10	1000		95	85	1500	1570	0.135	2 16 17 22	27132	
IRKH91/12	IRKL91/12	1200		95	85	1500	1570	0.135	2 16 17 22	27132	
IRKH91/14	IRKL91/14	1400		95	85	1500	1570	0.135	2 16 17 22	27132	
IRKH91/16	IRKL91/16	1600		95	85	1500	1570	0.135	2 16 17 22	27132	
IRKH105/16	IRKL105/16	1600		95	85	1500	1570	0.135	2 16 17 22	27133	
IRKH105/04	IRKL105/04	400		105	85	1500	1570	0.135	2 16 17 22	27133	
IRKH105/06	IRKL105/06	600		105	85	1500	1570	0.135	2 16 17 22	27133	
IRKH105/08	IRKL105/08	800		105	85	1500	1570	0.135	2 16 17 22	27133	
IRKH105/10	IRKL105/10	1000		105	85	1500	1570	0.135	2 16 17 22	27133	
IRKH105/12	IRKL105/12	1200		105	85	1500	1570	0.135	2 16 17 22	27133	
IRKH105/14	IRKL105/14	1400		105	85	1500	1570	0.135	2 16 17 22	27133	

Thyristor / High Voltage Diode

INT-A-Pak



IRKH136-04	IRKL136-04	400		135	85	2700	2800	0.1	2 19 20 22	87101	M5
IRKH136-08	IRKL136-08	800		135	85	2700	2800	0.1	2 19 20 22	87101	
IRKH136-12	IRKL136-12	1200		135	85	2700	2800	0.1	2 19 20 22	87101	
IRKH136-14	IRKL136-14	1400		135	85	2700	2800	0.1	2 19 20 22	87101	
IRKH136-16	IRKL136-16	1600		135	85	2700	2800	0.1	2 19 20 22	87101	
IRKH142-08	IRKL142-08	800		140	85	4000	4200	0.085	2 19 20 22	87101	
IRKH142-12	IRKL142-12	1200		140	85	4000	4200	0.085	2 19 20 22	87101	
IRKH142-16	IRKL142-16	1600		140	85	4000	4200	0.085	2 19 20 22	87101	
IRKH142-18	IRKL142-18	1800		140	85	4000	4200	0.085	2 19 20 22	87101	
IRKH142-20	IRKL142-20	2000		140	85	4000	4200	0.085	2 19 20 22	87101	
IRKH162-04	IRKL162-04	400		160	85	4300	4500	0.085	2 19 20 22	87101	
IRKH162-08	IRKL162-08	800		160	85	4300	4500	0.085	2 19 20 22	87101	
IRKH162-12	IRKL162-12	1200		160	85	4300	4500	0.085	2 19 20 22	87101	
IRKH162-14	IRKL162-14	1400		160	85	4300	4500	0.085	2 19 20 22	87101	
IRKH162-16	IRKL162-16	1600		160	85	4300	4500	0.085	2 19 20 22	87101	

NOTES:

2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C

4 Vtm @ pi X It(AV), Tj=125°C

15 dv/dt exponential to 0.67; Tj = 125°C

16 Available with flag terminal. To order, change last '0' to '2' in part number, e.g. ST180S04P2V

17 Available without auxiliary cathode. Refer to case outline for details.

18 Available in center tap (circuit common anode or circuit common cathode) configurations. Refer to case outline for details.

19 Available with spacers and longer terminal screws. Refer to case outline for details.

20 RMS isolation voltage = 3000V - 50Hz

21 RMS isolation voltage = 2500V - 50Hz

22 Value given for RthJC is per module.

24 RMS isolation voltage = 4000V - 50Hz

25 RMS isolation voltage = 3500 - 50Hz

Phase Control SCR

International
IOR Rectifier

Part Number Doubler Circuit Positive Control	Part Number Doubler Circuit Negative Control	Voltage Range Thyristor (V)	Diode (V)	$I_{T(AV)}$ (A)	@T_C (°C)	I_{TSM} 50 Hz (A)	60 Hz (A)	$R_{\Theta JC(DC)}$ (K/W)	Notes	Fax-on-Demand	Outline
Thyristor / High Voltage Diode										MAGN-A-Pak	
IRKH170-04	IRKL170-04	400		170	85	4300	4500	0.085	2 20 22	87102	M6
IRKH170-08	IRKL170-08	800		170	85	4300	4500	0.085	2 20 22	87102	
IRKH170-12	IRKL170-12	1200		170	85	4300	4500	0.085	2 20 22	87102	
IRKH170-14	IRKL170-14	1400		170	85	4300	4500	0.085	2 20 22	87102	
IRKH170-16	IRKL170-16	1600		170	85	4300	4500	0.085	2 20 22	87102	
IRKH230-08	IRKL230-08	800		230	85	6300	6600	0.063	2 20 22	87102	
IRKH230-12	IRKL230-12	1200		230	85	6300	6600	0.063	2 20 22	87102	
IRKH230-16	IRKL230-16	1600		230	85	6300	6600	0.063	2 20 22	87102	
IRKH230-18	IRKL230-18	1800		230	85	6300	6600	0.063	2 20 22	87102	
IRKH230-20	IRKL230-20	2000		230	85	6300	6600	0.063	2 20 22	87102	
IRKH250-04	IRKL250-04	400		250	85	7150	7500	0.063	2 20 22	87102	
IRKH250-08	IRKL250-08	800		250	85	7150	7500	0.063	2 20 22	87102	
IRKH250-12	IRKL250-12	1200		250	85	7150	7500	0.063	2 20 22	87102	
IRKH250-14	IRKL250-14	1400		250	85	7150	7500	0.063	2 20 22	87102	
IRKH250-16	IRKL250-16	1600		250	85	7150	7500	0.063	2 20 22	87102	
Thyristor / High Voltage Diode										Super MAGN-A-Pak	
IRKH430-16	IRKL430-16	1600		430	82	13200	13800	0.032	2 20 22		M7
IRKH430-18	IRKL430-18	1800		430	82	13200	13800	0.032	2 20 22		
IRKH430-20	IRKL430-20	2000		430	82	13200	13800	0.032	2 20 22		
IRKH500-08	IRKL500-08	800		500	82	15000	15700	0.032	2 20 22		
IRKH500-12	IRKL500-12	1200		500	82	15000	15700	0.032	2 20 22		
IRKH500-14	IRKL500-14	1400		500	82	15000	15700	0.032	2 20 22		
IRKH500-16	IRKL500-16	1600		500	82	15000	15700	0.032	2 20 22		

NOTES:

2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C

4 Vtm @ pi X It(AV), Tj=125°C

15 dv/dt exponential to 0.67; Tj = 125°C

16 Available with flag terminal. To order, change last '0' to '2' in part number, e.g. ST180S04P2V

17 Available without auxiliary cathode. Refer to case outline for details.

18 Available in center tap (circuit common anode or circuit common cathode) configurations. Refer to case outline for details.

19 Available with spacers and longer terminal screws. Refer to case outline for details.

20 RMS isolation voltage = 3000V - 50Hz

21 RMS isolation voltage = 2500V - 50Hz

22 Value given for RthJC is per module.

24 RMS isolation voltage = 4000V - 50Hz

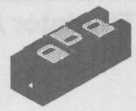
25 RMS isolation voltage = 3500 - 50Hz

Phase Control SCR

International
IOR Rectifier

Thyristor / High Voltage Diode

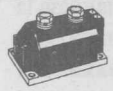
INT-A-Pak



Part Number Doubler Circuit Positive Control	Part Number Doubler Circuit Negative Control	Voltage Range Thyristor (V)	Diode (V)	$I_{T(AV)}$ (A)	@T_C (°C)	I_{TSM} 50 Hz (A)	60 Hz (A)	$R_{\Theta JC(DC)}$ (K/W)	Notes	Fax-on-Demand	Outline
IRKH136-14D20	IRKL136-14D2	1400	2000	135	85	2700	2800	0.1	2 19 20 22	87101	M5
IRKH136-16D25	IRKL136-16D2	1600	2500	135	85	2700	2800	0.1	2 19 20 22	87101	
IRKH142-14D20	IRKL142-14D2	1400	2000	140	85	4000	4200	0.085	2 19 20 22	87101	
IRKH142-16D25	IRKL142-16D2	1600	2500	140	85	4000	4200	0.085	2 19 20 22	87101	
IRKH142-18D28	IRKL142-18D2	1800	2800	140	85	4000	4200	0.085	2 19 20 22	87101	
IRKH142-20D32	IRKL142-20D3	2000	3200	140	85	4000	4200	0.085	2 19 20 22	87101	

Thyristor / High Voltage Diode

MAGN-A-Pak



IRKH162-14D20	IRKL162-14D2	1400	2000	160	85	4300	4500	0.085	2 20 22	87101	M6
IRKH162-16D25	IRKL162-16D2	1600	2500	160	85	4300	4500	0.085	2 20 22	87101	
IRKH170-14D20	IRKL170-14D2	1400	2000	170	85	4300	4500	0.085	2 20 22	87102	
IRKH170-16D25	IRKL170-16D2	1600	2500	170	85	4300	4500	0.085	2 20 22	87102	
IRKH230-14D20	IRKL230-14D2	1400	2000	230	85	6300	6600	0.063	2 20 22	87102	
IRKH230-16D25	IRKL230-16D2	1600	2500	230	85	6300	6600	0.063	2 20 22	87102	
IRKH230-18D28	IRKL230-18D2	1800	2800	230	85	6300	6600	0.063	2 20 22	87102	
IRKH230-20D32	IRKL230-20D3	2000	3200	230	85	6300	6600	0.063	2 20 22	87102	
IRKH250-14D20	IRKL250-14D2	1400	2000	250	85	7150	7500	0.063	2 20 22	87102	
IRKH250-16D25	IRKL250-16D2	1600	2500	250	85	7150	7500	0.063	2 20 22	87102	

NOTES:

2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C

4 Vtm @ pi X It(AV), Tj=125°C

15 dv/dt exponential to 0.67; Tj = 125°C

16 Available with flag terminal. To order, change last '0' to '2' in part number, e.g. ST180S04P2V

17 Available without auxiliary cathode. Refer to case outline for details.

18 Available in center tap (circuit common anode or circuit common cathode) configurations. Refer to case outline for details.

19 Available with spacers and longer terminal screws. Refer to case outline for details.

20 RMS isolation voltage = 3000V - 50Hz

21 RMS isolation voltage = 2500V - 50Hz

22 Value given for RthJC is per module.

24 RMS isolation voltage = 4000V - 50Hz

25 RMS isolation voltage = 3500 - 50Hz

Phase Control SCR

International
IOR Rectifier

Single Phase Controlled Bridge

PACE-Pak

Part Number	w/ free-wheeling diode	w/ free-wheeling diode & voltage suppression	VRRM VDRM (V)	I_O (A)	@T_C (°C)	I_{TM} (A)	I_{TSM} 50 Hz (A)	I_{TSM} 60 Hz (A)	$R_{\theta JC(DC)}$ (K/W)	Notes	Fax-on-Demand	Outline
P104	P104W	P104KW	100	25	85	12.5	300	315	0.56	2 21 22	ckt	M1
P124			100	25	85	12.5	300	315	0.56	2 21 22	ckt	
P134			100	25	85	12.5	300	315	0.56	2 21 22	ckt	
P101	P101W	P101KW	400	25	85	12.5	300	315	0.56	2 21 22	ckt	
P131			400	25	85	12.5	300	315	0.56	2 21 22	ckt	
P121			400	25	85	12.5	300	315	0.56	2 21 22	ckt	
P122			600	25	85	12.5	300	315	0.56	2 21 22	ckt	
P132			600	25	85	12.5	300	315	0.56	2 21 22	ckt	
P102	P102W	P102KW	600	25	85	12.5	300	315	0.56	2 21 22	ckt	
P133			800	25	85	12.5	300	315	0.56	2 21 22	ckt	
P123			800	25	85	12.5	300	315	0.56	2 21 22	ckt	
P103	P103W	P103KW	800	25	85	12.5	300	315	0.56	2 21 22	ckt	
P135			1200	25	85	12.5	300	315	0.56	2 21 22	ckt	
P105	P105W	P105KW	1200	25	85	12.5	300	315	0.56	2 21 22	ckt	
P125			1200	25	85	12.5	300	315	0.56	2 21 22	ckt	
P424			100	40	85	20	325	340	0.263	2 21 22	ckt	
P434			100	40	85	20	325	340	0.263	2 21 22	ckt	
P404	P404W	P404KW	100	40	85	20	325	340	0.263	2 21 22	ckt	
P431			400	40	85	20	325	340	0.263	2 21 22	ckt	
P421			400	40	85	20	325	340	0.263	2 21 22	ckt	
P401	P401W	P401KW	400	40	85	20	325	340	0.263	2 21 22	ckt	
P422			600	40	85	20	325	340	0.263	2 21 22	ckt	
P432			600	40	85	20	325	340	0.263	2 21 22	ckt	
P402	P402W	P402KW	600	40	85	20	325	340	0.263	2 21 22	ckt	
P423			800	40	85	20	325	340	0.263	2 21 22	ckt	
P403	P403W	P403KW	800	40	85	20	325	340	0.263	2 21 22	ckt	
P433			800	40	85	20	325	340	0.263	2 21 22	ckt	
P405	P405W	P405KW	1200	40	85	20	325	340	0.263	2 21 22	ckt	
P425			1200	40	85	20	325	340	0.263	2 21 22	ckt	
P435			1200	40	85	20	325	340	0.263	2 21 22	ckt	

NOTES:

2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C

4 Vtm @ pi X It(AV), Tj=125°C

15 dv/dt exponential to 0.67; Tj = 125°C

16 Available with flag terminal. To order, change last '0' to '2' in part number, e.g. ST180S04P2V

17 Available without auxiliary cathode. Refer to case outline for details.

18 Available in center tap (circuit common anode or circuit common cathode) configurations. Refer to case outline for details.

19 Available with spacers and longer terminal screws. Refer to case outline for details.

20 RMS isolation voltage = 3000V - 50Hz

21 RMS isolation voltage = 2500V - 50Hz

22 Value given for RthJC is per module.

24 RMS isolation voltage = 4000V - 50Hz

25 RMS isolation voltage = 3500 - 50Hz

Phase Control SCR

International
IOR Rectifier

AC Controllers
3-Phase (3 back-to-back SCRs)

INT-A-Pak

Part Number	VRRM VDRM (V)	$I_{T(RM}$ (A)	@T_C (°C)	V_{TM} (V)	@I_{TM} (A)	I_{TSM} 50 Hz (A)	I_{TSM} 60 Hz (A)	$R_{\Theta JC(DC)}$ (K/W)	Notes	Fax-on-Demand	Outline
54MT80K	800	50	80	2.68	150	330	345	0.187	2 21 24	87114	B13
54MT100K	1000	50	80	2.68	150	330	345	0.187	2 21 24	87114	
54MT120K	1200	50	80	2.68	150	330	345	0.187	2 21 24	87114	
54MT140K	1400	50	80	2.68	150	330	345	0.187	2 21 24	87114	
54MT160K	1600	50	80	2.68	150	330	345	0.187	2 21 24	87114	
94MT80K	800	90	80	1.55	150	800	840	0.137	2 21 24	87114	
94MT100K	1000	90	80	1.55	150	800	840	0.137	2 21 24	87114	
94MT120K	1200	90	80	1.55	150	800	840	0.137	2 21 24	87114	
94MT140K	1400	90	80	1.55	150	800	840	0.137	2 21 24	87114	
94MT160K	1600	90	80	1.55	150	800	840	0.137	2 21 24	87114	
104MT80K	800	100	80	1.53	150	950	1000	0.119	2 21 24	87114	
104MT100K	1000	100	80	1.53	150	950	1000	0.119	2 21 24	87114	
104MT120K	1200	100	80	1.53	150	950	1000	0.119	2 21 24	87114	
104MT140K	1400	100	80	1.53	150	950	1000	0.119	2 21 24	87114	
104MT160K	1600	100	80	1.53	150	950	1000	0.119	2 21 24	87114	

NOTES:

2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C

4 Vtm @ pi X It(AV), Tj=125°C

15 dv/dt exponential to 0.67; Tj = 125°C

16 Available with flag terminal. To order, change last '0' to '2' in part number, e.g. ST180S04P2V

17 Available without auxiliary cathode. Refer to case outline for details.

18 Available in center tap (circuit common anode or circuit common cathode) configurations. Refer to case outline for details.

19 Available with spacers and longer terminal screws. Refer to case outline for details.

20 RMS isolation voltage = 3000V - 50Hz

21 RMS isolation voltage = 2500V - 50Hz

22 Value given for RthJC is per module.

24 RMS isolation voltage = 4000V - 50Hz

25 RMS isolation voltage = 3500 - 50Hz

3-Phase Controlled Bridges

INT-A-Pak

3-Phase Positive Controlled Bridge	3-Phase Negative Controlled Bridge	3-Phase Fully Controlled Bridge	VRRM VDRM (V)	$I_{O(DC)}$ (A)	@T_C (°C)	V_{TM} (V)	I_{TSM} 50 Hz (A)	I_{TSM} 60 Hz (A)	$R_{\Theta JC(DC)}$ (K/W)	Notes	Fax-on-Demand	Outline
52MT80K	51MT80K	53MT80K	800	55	85	2.68	330	345	0.179	2 22 24	87113	B13
52MT100K	51MT100K	53MT100K	1000	55	85	2.68	330	345	0.179	2 22 24	87113	
52MT120K	51MT120K	53MT120K	1200	55	85	2.68	330	345	0.179	2 22 24	87113	
52MT140K	51MT140K	53MT140K	1400	55	85	2.68	330	345	0.179	2 22 24	87113	
52MT160K	51MT160K	53MT160K	1600	55	85	2.68	330	345	0.179	2 22 24	87113	
92MT80K	91MT80K	93MT80K	800	90	85	1.65	800	840	0.144	2 22 24	87113	
92MT100K	91MT100K	93MT100K	1000	90	85	1.65	800	840	0.144	2 22 24	87113	
92MT120K	91MT120K	93MT120K	1200	90	85	1.65	800	840	0.144	2 22 24	87113	
92MT140K	91MT140K	93MT140K	1400	90	85	1.65	800	840	0.144	2 22 24	87113	
92MT160K	92MT160K	93MT160K	1600	90	85	1.65	800	840	0.144	2 22 24	87113	
112MT80K	111MT80K	113MT80K	800	110	95	1.57	950	1000	0.117	2 22 24	87113	
112MT100K	111MT100K	113MT100	1000	110	95	1.57	950	1000	0.117	2 22 24	87113	
112MT120K	111MT120K	113MT120	1200	110	95	1.57	950	1000	0.117	2 22 24	87113	
112MT140K	111MT140K	113MT140	1400	110	95	1.57	950	1000	0.117	2 22 24	87113	
112MT160K	111MT160K	113MT160	1600	110	95	1.57	950	1000	0.117	2 22 24	87113	

NOTES:

2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C

4 Vtm @ pi X It(AV), Tj=125°C

15 dv/dt exponential to 0.67; Tj = 125°C

16 Available with flag terminal. To order, change last '0' to '2' in part number, e.g. ST180S04P2V

17 Available without auxiliary cathode. Refer to case outline for details.

18 Available in center tap (circuit common anode or circuit common cathode) configurations. Refer to case outline for details.

19 Available with spacers and longer terminal screws. Refer to case outline for details.

20 RMS isolation voltage = 3000V - 50Hz

21 RMS isolation voltage = 2500V - 50Hz

22 Value given for RthJC is per module.

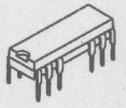
24 RMS isolation voltage = 4000V - 50Hz

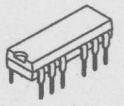
25 RMS isolation voltage = 3500 - 50Hz

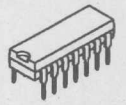
Control Integrated Circuits

International
IOR Rectifier


16-Lead SOIC


16-Lead DIP

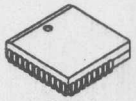

14-lead DIP w/o 4


14-Lead DIP

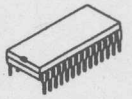
Part Number	V_{Offset} (V)	$I_{O+/-}$ (mA)	V_{OUT} (V)	$t_{on / off}$ (ns)	Design Features	Fax-on-Demand
High and Low Side Driver						
IR2110	500	2 / 2	10 / 20	120 / 94	Delay Matching (ns) 10 *Cycle-by-cycle edge-triggered shutdown logic* *Separate logic & power returns*	60011
IR2112	600	200 / 420	10 / 20	125 / 105	Delay Matching (ns) 30 *Separate logic and low side supplies* *Cycle-by-cycle edge-triggered shutdown logic*	60026
IR2113	600	2 / 2	10 / 20	120 / 94	Delay Matching (ns) 10 *Separate logic and low side supplies* *Cycle-by-cycle edge-triggered shutdown logic*	60030

Control Integrated Circuits

International
IOR Rectifier


44-Lead PLCC


28-Lead SOIC


28-Lead DIP

Part Number	V_{Offset} (V)	$IO+/-$ (mA)	V_{OUT} (V)	$t_{on / off}$ (ns)	Design Features	Fax-on-Demand
3 High Side & 3 Low Side Driver						
IR2131	600	200 / 420	10 / 20	1.3 / 0.6	Deadtime (ns) 700 *Independent 3 high-side and 3 low-side drivers* *Over-current shutdown turns off all 6 drivers*	60032
3-Phase Bridge Driver						
IR2130	600	200 / 420	10 / 20	675 / 425	Deadtime (ns) 2.5 *Independent half-bridge drivers* *Over-current shutdown turns off all 6 drivers*	60019
IR2132	600	200 / 420	10 / 20	675 / 425	Deadtime (ns) 0.8 *Independent half-bridge drivers* *Over-current shutdown turns off all 6 drivers*	60033

Control Integrated Circuits

International
IOR Rectifier

8-Lead DIP

Part Number	V_{Offset} (V)	IO+/– (mA)	V_{OUT} (V)	$t_{on / off}$ (ns)	Design Features	Fax-on-Demand
Current Limiting Low Side Driver						
IR2121	5	1 / 2	12 / 18	150 / 150	VCSth (mV) 230 *Undervoltage lockout* *Current detection & limiting loop*	60018
Current Limiting Single Channel Driver						
IR2125	500	1 / 2	12 / 18	150 / 150	VCSth (mV) 230 *Undervoltage lockout* *Current detection & limiting loop*	60017
Current Sensing Single Channel Driver						
IR2127	600	200 / 420	10 / 20	150 / 100	VCSth (mV) 250 *Undervoltage lockout* *Overcurrent shutdown*	60036
IR2128	600	200 / 420	10 / 20	150 / 100	VCSth (mV) 250 *Undervoltage lockout* *Overcurrent shutdown*	60042
Half-Bridge Driver						
IR2111	600	200 / 420	10 / 20	850 / 150	Deadtime (ns) 700 *Floating VBS drive channel* *Internal deadtime control*	60028

Control Integrated Circuits

International
IOR Rectifier

8-Lead SOIC

8-Lead DIP

Part Number	V_{Offset} (V)	IO+/– (mA)	V_{OUT} (V)	$t_{on / off}$ (ns)	Design Features	Fax-on-Demand
High and Low Side Driver						
IR2101	600	100 / 210	10 / 20	130 / 90	Delay Matching (ns) 30 *Floating VBS Drive Channel* *Undervoltage lockout*	60044
IR2102	600	100 / 210	10 / 20	130 / 90	Delay Matching (ns) 30 *Floating VBS Drive Channel* *Undervoltage lockout*	60043
IR2103	600	100 / 210	10 / 20	600 / 90	Deadtime (ns) 500 *Floating VBS Drive Channel* *Cross-conduction prevention*	60045
IR2104	600	100 / 210	10 / 20	600 / 90	Deadtime (ns) 500 *Cross-conduction prevention* *Internal deadtime control*	60046
Self-Oscillating Half-Bridge Driver						
IR2151	600	100 / 210	10 / 20		Deadtime (ns) 1.2 *Programmable oscillator frequency* *50% duty cycle*	60034
IR2152	600	100 / 210	10 / 20		Deadtime (ns) 1.2 *Programmable oscillator frequency* *50% duty cycle*	60035
IR2153	600	200 / 400			Deadtime (µs) 1.2 *Vclamp = 15.6V* *50% duty cycle*	60062
IR2155	600	210 / 420	10 / 20		Deadtime (ns) 1.2 *Programmable oscillator frequency* *Micropower supply startup current of 125µA typical*	60029

8-Lead SOIC

8-Lead DIP

Part Number	V_{Offset} (V)	IO+/– (mA)	V_{OUT} (V)	$t_{on / off}$ (ns)	Design Features	Fax-on-Demand
Single Channel Driver						
IR2117	600	200 / 420	10 / 20	125 / 105	*Floating VBS drive channel* *Undervoltage lockout*	60031
IR2118	600	200 / 420	10 / 20	125 / 105	*Floating VBS drive channel* *Undervoltage lockout*	60041

Control Integrated Circuit Hybrids

International
IOR Rectifier

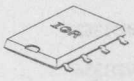
9-Lead SIP

Part Number	V_{IN} (V)	$R_{DS(on)}$ (Ω)	P_D @ T_C=25°C (Ω)	Duty Cycle	Deadtime (µs)	Fax-on-Demand
Self-Oscillating Half-Bridge						
IR51H214	250	2.0	2.0	50%	1.2	60058
IR51H224	250	1.1	2.0	50%	1.2	60059
IR51H310	400	3.6	2.0	50%	1.2	60060
IR51H320	400	1.8	2.0	50%	1.2	60067
IR51H420	500	3.0	2.0	50%	1.2	60057
IR51H737	300	0.8	2.0	50%	1.2	60061
IR51HD214	250	2.0	2.0	50%	1.2	60058

Microelectronic Relays

International
IOR Rectifier

Gen 2 Photovoltaic Relays

Part Number	Operating Voltage Range V(Pk) (+/-)	Max. On-State Resistance @25°C (Ω) (AC /DC)	Max. Load Current @40°C AC / DC (mA)	Nominal Control Current (DC) (mA)	Minimum Off-State Resistance (Ohms)	Dielectric Strength Input/ Output V(RMS)	Max. Response Time On/ Off (msec)	Max. Thermal Offset Voltage @5mA Control (µV)	Fax-on-Demand	Outline
Single-Pole 										
PVG612	±60	0.5/ 0.15	1000/ 2000	5	10^8	4000	2/ 0.5		10035	MR6
PVN012	±20	0.1/ 0.04	2500/ 4500	3	$0.16x10^8$	4000	5/ 0.5		10034	
PVT312	±250	10/ 3	190/ 320	2	$2.5x10^8$	4000	3/ 0.5		10038	
PVT312L	±250	15/ 4.25	170/ 300	2	$2.5x10^8$	4000	3/ 0.5		10038	
PVT412	±400	27/ 7	140/ 210	3	$4x10^8$	4000	2/ 0.5	0.5	60040	
PVT412L	±400	35/ 9	120/ 200	3	$4x10^8$	4000	2/ 0.5	0.5	60040	
PVU414	±400	27/ 7	140/ 210	3	10^1	4000	.5/ 0.2	0.2	10031	
Dual-Pole 										
PVT322	±250	10	170	2	$2.5x10^8$	4000	3/ 0.5		10042	MR7
PVT422	±400	35	120	2	$3.2x10^8$	4000	2/ 2		10037	
Thin-Pak 										
PVO402P	±400	35	120	3	$4x10^8$	3750	2/ 0.5		10036	MR8

Microelectronic Relays

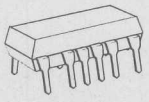
International
IOR Rectifier

Photovoltaic Relays

PVA / PVD

Part Number	Operating Voltage Range V(Pk) (+/-)	Max. On-State Resistance @25°C (Ω) (AC / DC)	Max. Load Current @40°C DC (mA)	Nominal Control Current (DC) (mA)	Minimum Off-State Resistance (Ohms)	Dielectric Strength Input/ Output V(RMS)	Max. Response Time On/ Off (µsec)	Max. Thermal Offset Voltage @5mA Control (µV)	Fax-on-Demand	Outline
PVA1052	±100	35	70	5	10^8	2500	25/ 15	0.2	10019	MR1
PVA1054	±100	35	70	5	10^1	2500	25/ 15	0.2	10019	
PVA1352	±100	5	315	5	10^8	2500	300/ 50	0.2	10020	
PVA1354	±100	5	315	5	10^1	2500	300/ 50	0.2	10020	
PVA2352	±200	24	130	5	10^8	2500	100/ 50	0.2	10021	
PVA3054	±300	160	40	5	10^1	2500	25/ 15	0.2	10030	
PVA3055	±300	160	40	5	10^1	2500	25/ 15	0.2	10030	
PVA3324	±300	24	130	2	10^1	2500	100/ 50	0.2	10021	
PVA3354	±300	24	130	5	10^1	2500	100/ 50	0.2	10021	
PVAZ172N	±60	0.5	1000	10	10^8	4000	2000/ 500		10040	
PVD1052	+100	8	160	5	10^8	2500	25/ 15	0.2	10023	
PVD1054	+100	8	160	5	10^1	2500	25/ 15	0.2	10023	
PVD1352	+100	1.5	500	5	10^8	2500	300/ 50	0.2	10024	
PVD1354	+100	1.5	500	5	10^1	2500	300/ 50	0.2	10024	
PVD2352	+200	6	220	5	10^8	2500	100/ 50	0.2	10025	
PVD3354	+300	6	220	5	10^1	2500	100/ 50	0.2	10025	
PVDZ172N	+60	0.25	1500	10	10^8	4000	2000/ 500		10039	

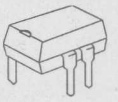
PVR



PVR1300	±100	5/ 1.5	700	10	10^8	1500	300/ 50	0.2	10027	MR3
PVR1301	±100	5/ 1.5	700	10	10^1	1500	300/ 50	0.2	10027	
PVR2300	±200	24/ 6	260	10	10^8	1500	150/ 50	0.2	10028	
PVR3300	±300	24/ 6	260	10	10^8	1500	150/ 50	0.2	10028	
PVR3301	±300	24/ 6	260	10	10^1	1500	150/ 50	0.2	10028	

Microelectronic Relays

International
IOR Rectifier

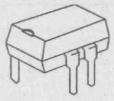
Part Number	Number of Outputs	Output Voltage V(DC)	Short Circuit Current (µA)	Nominal Control Curren (mA)	Dielectric Strength Input/Output V(RMS)	Fax-on-Demand	Outline
Photovoltaic Isolators							
					PVI 		
PVI1050	2	5/10	10/5	10	2500	10029	MR1
PVI5050	1	5	5	10	2500	10029	
PVI5080	1	5	8	10	2500	10029	
PVI5100	1	5	10	10	2500	10029	
					Dual-Pole 		
PVI5013R	2	3	1	10	3750	11041	MR7

Microelectronic Relays

International
IOR Rectifier

ChipSwitch

ChipSwitch

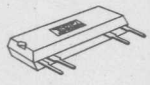


Part Number	Operating Voltage Range V(RMS)	Max. Load Current @ 40° C A(RMS)	Transient Overvolt V(Pk)	Turn-on Signal (DC)	Dielectric Strength Input / Output V(RMS)	Min. Off-State dv/dt @ rated V (25°C) (V/µs)	Max. Off-State Leakage (µV)	Fax-on-Demand	Outline
CS5005	20 to 280	.3	500	5mA	4000	1200	10	10016	MR1
CS5010	20 to 280	.3	500	10mA	4000	1200	10	10016	
CS6005	20 to 280	.3	600	5mA	4000	1200	10	10016	
CS6010	20 to 280	.3	600	10mA	4000	1200	10	10016	

DPA

DPA4111	20 to 140	1	400	10mA	4000	600	10	10033	MR2
DPA4119	20 to 140	1	400	3.5V	4000	600	10	10033	
DPA6111	20 to 280	1	600	10mA	4000	600	10	10033	
DPA6119	20 to 280	1	600	3.5V	4000	600	10	10033	

SPA



SPA4191	20 to 140	.9	400	10mA	4000	600	10	10032	MR5
SPA6191	20 to 280	.9	600	10mA	4000	600	10	10032	

HEXFET® Power MOSFETs

International
IOR Rectifier

Surface Mount

Micro3 (SOT-23)

Part Number	$V_{(BR)DSS}$ Drain-to-Source Breakdown Voltage (V)	$R_{DS(on)}$ On-State Resistance (Ω)	I_D Continuous Drain Current 25°C (A)	I_D Continuous Drain Current 70°C (A)	$R_{\theta JA}$ Max Thermal Resistance (°C/W)	P_D Max. Power Dissipation @ T_A = 25°C (W)	Fax-on-Demand	Case Outline
N-Channel		*Logic Level*						
IRLML2402*	20	0.25	0.93	0.74	370	340	91257	H1
IRLML2803	30	0.25	0.91	0.73	370	340	91258	
P-Channel		*Logic Level*						
IRLML5103	-30	0.6	-0.6	-0.48	370	340	91260	H1
IRLML6302*	-20	0.6	-0.61	-0.49	370	340	91259	

** Indicates low VGS(th), which can operate at VGS= 2.7V*

Micro3™, Micro6™ and Micro8™ are trademarks of International Rectifier

HEXFET® Power MOSFETs

International
IOR Rectifier

Part Number	$V_{(BR)DSS}$ Drain-to-Source Breakdown Voltage (V)	$R_{DS(on)}$ On-State Resistance (Ω)	I_D Continuous Drain Current 25°C (A)	I_D Continuous Drain Current 100°C (A)	$R_{\theta JC}$ Max Thermal Resistance (°C/W)	P_D Max. Power Dissipation @ T_C = 25°C (W)	Fax-on-Demand	Case Outline
Surface Mount							Micro6	
N-Channel		*Logic Level*						
IRLMS1503	30	0.1	2.2	1.8	160	780	91508	H1.5
IRLMS1902*	20	0.1	2.2	1.8	160	780	91540	
P-Channel		*Logic Level*						
IRLMS5703	-30	0.2	-1.6	-1.3	160	780	91413	H1.5
IRLMS6702*	-20	0.2	-1.6	-1.3	160	780	91414	

** Indicates low VGS(th), which can operate at VGS= 2.7V*

Surface Mount

Micro8

Part Number	$V_{(BR)DSS}$ Drain-to-Source Breakdown Voltage (V)	$R_{DS(on)}$ On-State Resistance (Ω)	I_D Continuous Drain Current 25°C (A)	I_D Continuous Drain Current 70°C (A)	$R_{\theta JA}$ Max Thermal Resistance (°C/W)	P_D Max. Power Dissipation @ T_A = 25°C (W)	Fax-on-Demand	Case Outline
N-Channel	*Logic Level*							
IRF7601*	20	0.035	3.8	3	160	780	91261	H2
IRF7603	30	0.035	3.7	3	160	780	91262	
Dual N-Channel	*Logic Level*							
IRF7501*	20	0.135	1.7	1.4	200	625	91265	H2
IRF7503	30	0.135	1.7	1.4	200	625	91266	
P-Channel	*Logic Level*							
IRF7604*	-20	0.09	-2.4	-1.9	160	780	91263	H2
IRF7606	-30	0.09	-2.4	-1.9	160	780	91264	
Dual P-Channel	*Logic Level*							
IRF7504*	-20	0.27	-1.2	-0.96	200	625	91267	H2
IRF7506	-30	0.27	-1.2	-0.96	200	625	91268	
Dual N- and P-Channel	*Logic Level*							
IRF7507*	20	0.135	1.7	1.4	200	625	91269	H2
	-20	0.27	-1.2	-0.96	200	625	91269	
IRF7509	30	0.135	1.6	1.3	200	625	91270	
	-30	0.27	-1.2	-0.96	200	625	91270	

** Indicates low VGS(th), which can operate at VGS = 2.75V*

Surface Mount

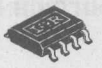
SO-8

Part Number	$V_{(BR)DSS}$ Drain-to-Source Breakdown Voltage (V)	$R_{DS(on)}$ On-State Resistance (Ω)	I_D Continuous Drain Current 25°C (A)	I_D Continuous Drain Current 70°C (A)	$R_{\theta JA}$ Max Thermal Resistance (°C/W)	P_D Max. Power Dissipation @ T_A = 25°C (W)	Fax-on-Demand	Case Outline
N-Channel		*Logic Level*						
IRF7201	30	0.03	7	5.6	50	2.5	91100	H3
IRF7401*	20	0.022	8.9	5.5	80	1.6	91244	
IRF7403	30	0.022	8.6	5.4	80	1.6	91245	
IRF7413	30	0.011	12	5.8	50	2.5	91330	
Dual N-Channel		*Logic Level*						
IRF7101	20	0.1	3.5	2.3	62	2	90871	H3
IRF7103	50	0.13	3	2.3	62	1.4	91095	
IRF7301*	20	0.05	5	3.4	90	1.4	91238	
IRF7303	30	0.05	4.7	3.2	90	1.4	91239	
IRF7311*	20	0.029	6.6	5.3	62.5	2	91435	
IRF7313	30	0.029	7	3.2	62.5	2	91480	
IRF9956	30	0.1	3.5	2.8	62.5	2	91559	
P-Channel		*Logic Level*						
IRF7204	-20	0.06	-5.3	-4.2	50	2.5	91103	H3
IRF7205	-30	0.07	-4.6	-3.7	50	2.5	91104	
IRF7404*	-20	0.04	-6.8	-4.3	80	1.6	91246	
IRF7406	-30	0.045	-6	-3.8	80	1.6	91247	
IRF7416	-30	0.02	-8.8	-4.5	50	1	91356	
Dual P-Channel		*Logic Level*						
IRF7104	-20	0.25	-2.3	-1.8	90	1.4	91096	H3
IRF7304*	-20	0.09	-4	-2.9	90	1.4	91240	
IRF7306	-30	0.1	-3.5	-2.4	90	1.4	91241	
IRF7314*	-20	0.058	-4.2	-2.3	90	1.4	91435	
IRF7316	-30	0.058	-4.9	-3.9	62.5	2	91505	
IRF9953	-30	0.25	-2.3	-1.8	62.5	2	91560	
Dual N- and P-Channel		*Logic Level*						
IRF7105	25	0.1	3.5	2.8	62	2	91097	H3
	-25	0.25	-2.3	-1.8	62	2	91097	
IRF7307*	20	0.05	4.3	3.4	90	1.4	91242	
	-20	0.09	-4	-2.9	90	1.4	91242	
IRF7309	30	0.05	4	3.2	90	1.4	91243	
	-30	0.1	-3.5	-2.4	90	1.4	91243	
IRF9952	30	0.1	3.5	2.8	62.5	2	91562	
	-30	0.25	-2.3	-1.8	62.5	2	91562	

** Indicates low VGS(th) which can operate at VGS = 2.7V*

Surface Mount

FETKY SO-8



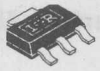
Part Number	$V_{(BR)DSS}$ Drain-to-Source Breakdown Voltage (V)	$R_{DS(on)}$ On-State Resistance (Ω)	I_D Continuous Drain Current 25°C (A)	I_D Continuous Drain Current 100°C (A)	$R_{\theta JC}$ Max Thermal Resistance (°C/W)	P_D Max. Power Dissipation @ T_C = 25°C (W)	VFM Forward Voltage Drop @ Tj = 25° C (V) Fax-on-Demand		Case Outline
FETKY (Co-packaged HEXFET Power MOSFET and Schottky Diode)									
IRF7421D1	30	0.035	6.4	3.3	50	2.5	0.50 @ 1.0A	91411	H2.5
IRF7422D2*	-20	0.09	-4.6	-2.3	50	2.5	0.57 @ 3.0A	91412	

** Indicates low VGS(th), which can operate at VGS = 2.7V*

FETKY™ is a trademark of International Rectifier

Surface Mount

SOT-223 (TO-261AA)



Part Number	$V_{(BR)DSS}$ Drain-to-Source Breakdown Voltage (V)	$R_{DS(on)}$ On-State Resistance (Ω)	I_D Continuous Drain Current 25°C (A)	I_D Continuous Drain Current 100°C (A)	$R_{\theta JA}$ Max Thermal Resistance (°C/W)	P_D Max. Power Dissipation @ T_C = 25°C (W)	Fax-on-Demand	Case Outline
N-Channel								
IRFL014	60	0.2	2.7	1.7	60	2	90860	H4
IRFL110	100	0.54	1.5	0.96	60	2	90861	
IRFL210	200	1.5	0.96	0.6	60	2	90868	
IRFL214	250	2	0.79	0.5	60	2	90862	
IRFL4105	55	0.045	5.2	3	60	2.1	91381	
IRFL4310	100	0.2	2.2	1.3	60	2.1	91368	
N-Channel		*Logic Level*						
IRLL014N	55	0.14	2.8	1.6	60	2.1	91499	H4
IRLL110	100	0.54	1.5	0.93	60	2	90869	
IRLL2705	55	0.04	5.2	3	60	2.1	91380	
IRLL3303	30	0.031	6.5	3.7	60	2.1	91379	
P-Channel								
IRFL9014	-60	0.5	-1.8	-1.1	60	2	90863	H4
IRFL9110	-100	1.2	-1.1	-0.69	60	2	90864	

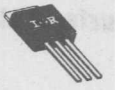
Surface Mount

TO-252AA (D-Pak)

Part Number	$V_{(BR)DSS}$ Drain-to-Source Breakdown Voltage (V)	$R_{DS(on)}$ On-State Resistance (Ω)	I_D Continuous Drain Current 25°C (A)	I_D Continuous Drain Current 100°C (A)	$R_{\theta JC}$ Max Thermal Resistance (°C/W)	P_D Max. Power Dissipation @ T_C = 25°C (W)	Fax-on-Demand	Case Outline
N-Channel								
IRFR014	60	0.2	7.7	4.9	5	25	90701	H5
IRFR024N	55	0.075	16	10	3.3	38	91336	
IRFR110	100	0.54	4.3	2.7	5	25	90524	
IRFR1205	55	0.027	37	23	1.8	69	91318	
IRFR120N	100	0.21	9.1	5.8	3.2	39	91365	
IRFR210	200	1.5	2.6	1.7	5	25	90526	
IRFR214	250	2	2.2	1.4	5	25	90703	
IRFR220	200	0.8	4.8	3	3	42	90525	
IRFR224	250	1.1	3.8	2.4	3	42	90600	
IRFR310	400	3.6	1.7	1.1	5	25	90597	
IRFR320	400	1.8	3.1	2	3	42	90598	
IRFR3910	100	0.11	15	9.5	2.4	52	91364	
IRFR4105	55	0.045	25	16	2.7	48	91302	
IRFR420	500	3	2.4	1.5	3	42	90599	
IRFRC20	600	4.4	2	1.3	3	42	90637	
N-Channel *Logic Level*								
IRLR014	60	0.2	7.7	4.9	5	25	90624	H5
IRLR024N	55	0.065	17	11	3.3	38	91363	
IRLR110	100	0.54	4.3	2.7	5	25	90633	
IRLR120	100	0.27	7.7	4.9	3	42	90636	
IRLR2703	30	0.045	22	14	3.3	38	91335	
IRLR2905	55	0.027	36	23	1.8	69	91334	
IRLR3103	30	0.019	46	29	1.8	69	91333	
P-Channel								
IRFR9014	-60	0.5	-5.1	-3.2	5	25	90654	H5
IRFR9024	-60	0.28	-8.8	-5.6	3	42	90655	
IRFR9110	-100	1.2	-3.1	-2	5	25	90519	
IRFR9120	-100	0.6	-5.6	-3.6	3	42	90520	
IRFR9210	-200	3	-1.9	-1.2	5	25	90521	
IRFR9220	-200	1.5	-3.6	-2.3	3	42	90522	
P-Channel *Logic Level*								
IRLR2705	55	0.04	24	15	2.7	46	91317	H5

Discrete

TO-251AA (I-Pak)



Part Number	$V_{(BR)DSS}$ Drain-to-Source Breakdown Voltage (V)	$R_{DS(on)}$ On-State Resistance (Ω)	I_D Continuous Drain Current 25°C (A)	I_D Continuous Drain Current 100°C (A)	$R_{\theta JC}$ Max Thermal Resistance (°C/W)	P_D Max. Power Dissipation @ T_C = 25°C (W)	Fax-on-Demand	Case Outline
N-Channel								
IRFU014	60	0.2	7.7	4.9	5	25	90701	H11
IRFU024N	55	0.075	16	10	3.3	38	91336	
IRFU110	100	0.54	4.3	2.7	5	25	90524	
IRFU1205	55	0.027	37	23	1.8	69	91318	
IRFU120N	100	0.21	9.1	5.8	3.2	39	91365	
IRFU210	200	1.5	2.6	1.7	5	25	90526	
IRFU214	250	2	2.2	1.4	5	25	90703	
IRFU220	200	0.8	4.8	3	3	42	90525	
IRFU224	250	1.1	3.8	2.4	3	42	90600	
IRFU310	400	3.6	1.7	1.1	5	25	90597	
IRFU320	400	1.8	3.1	2	3	42	90598	
IRFU3910	100	0.11	15	9.5	2.4	52	91364	
IRFU4105	55	0.045	25	19	2.7	48	91302	
IRFU420	500	3	2.4	1.5	3	42	90599	
IRFUC20	600	4.4	2	1.3	3	42	90637	
N-Channel	*Logic Level*							
IRLU014	60	0.2	7.7	4.9	5	25	90624	H11
IRLU024N	55	0.065	17	11	3.3	38	91363	
IRLU110	100	0.54	4.3	2.7	5	25	90633	
IRLU120	100	0.27	7.7	4.9	3	42	90636	
IRLU2703	30	0.045	22	14	3.3	38	91335	
IRLU2705	55	0.04	24	0	15	46	91317	
IRLU2905	55	0.027	36	23	1.8	69	91334	
IRLU3103	30	0.019	46	29	1.8	69	91333	
P-Channel								
IRFU9014	-60	0.5	-5.1	-3.2	5	25	90654	H11
IRFU9024	-60	0.28	-8.8	-5.6	3	42	90655	
IRFU9110	-100	1.2	-3.1	-2	5	25	90519	
IRFU9120	-100	0.6	-5.6	-3.6	3	42	90520	
IRFU9210	-200	3	-1.9	-1.2	5	25	90521	
IRFU9220	-200	1.5	-3.6	-2.3	3	42	90522	

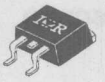
Discrete

HEXDIP (HD-1)

Part Number	$V_{(BR)DSS}$ Drain-to-Source Breakdown Voltage (V)	$R_{DS(on)}$ On-State Resistance (Ω)	I_D Continuous Drain Current 25°C (A)	I_D Continuous Drain Current 100°C (A)	$R_{\theta JC}$ Max Thermal Resistance (°C/W)	P_D Max. Power Dissipation @ T_C = 25°C (W)	Fax-on-Demand	Case Outline
N-Channel								
IRFD014	60	0.2	1.7	1.2	120	1.3	90700	H10
IRFD024	60	0.1	2.5	1.8	120	1.3	90699	
IRFD110	100	0.54	1	0.71	120	1.3	90328	
IRFD120	100	0.27	1.3	0.94	120	1.3	90385	
IRFD210	200	1.5	0.6	0.38	120	1.3	90386	
IRFD214	250	2	0.57	0.32	120	1.3	91271	
IRFD220	200	0.8	0.8	0.5	120	1.3	90417	
IRFD224	250	1.1	0.76	0.43	120	1.3	91272	
IRFD310	400	3.6	0.42	0.23	120	1.3	91225	
IRFD320	400	1.8	0.6	0.33	120	1.3	91226	
IRFD420	500	3	0.46	0.26	120	1.3	91227	
IRFDC20	600	4.4	0.32	0.21	120	1.3	91228	
N-Channel	*Logic Level*							
IRLD014	60	0.2	1.7	1.2	120	1.3	90628	H10
IRLD024	60	0.1	2.5	1.8	120	1.3	90629	
IRLD110	100	0.54	1	0.7	120	1.3	90635	
IRLD120	100	0.27	1.3	0.94	120	1.3	90634	
P-Channel								
IRFD9014	-60	0.5	-1.1	-0.8	120	1.3	90696	H10
IRFD9024	-60	0.28	-1.6	-1.1	120	1.3	90698	
IRFD9110	-100	1.2	-0.7	-0.49	120	1.3	90389	
IRFD9120	-100	0.6	-1	-0.7	120	1.3	90331	
IRFD9210	-200	3	-0.4	-0.25	120	1.3	90387	
IRFD9220	-200	1.5	-0.56	-0.36	120	1.3	90439	

Surface Mount

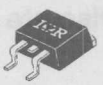
D²Pak



Part Number	$V_{(BR)DSS}$ Drain-to-Source Breakdown Voltage (V)	$R_{DS(on)}$ On-State Resistance (Ω)	I_D Continuous Drain Current 25°C (A)	I_D Continuous Drain Current 100°C (A)	$R_{\theta JC}$ Max Thermal Resistance (°C/W)	P_D Max. Power Dissipation @ T_C = 25°C (W)	Fax-on-Demand	Case Outline
N-Channel	*FETKY (Co-packaged HEXFET Power MOSFET and Schottky Diode)*							
IRL3103D1S	30	0.014	54	34	1.8	3.1	91558	H6
N-Channel								
IRF1010NS	55	0.012	72	51	1.2	3.8	91372	H6
IRF1310NS	100	0.036	36	25	1.3	120	91514	
IRF3205S	55	0.008	98	69	1	150	91304	
IRF3415S	150	0.042	37	26	1	150	91509	
IRF3710S	100	0.028	46	33	1	150	91310	
IRF510S	100	0.54	5.6	4	3.5	43	90895	
IRF520NS	100	0.2	9.5	6.7	3.2	47	91340	
IRF530NS	100	0.11	15	11	2.4	63	91352	
IRF540NS	100	0.052	27	19	1.6	110	91342	
IRF610S	200	1.5	3.3	2.1	3.5	36	90899	
IRF614S	250	2	2.7	1.7	3.5	36	91003	
IRF620S	200	0.8	5.2	3.3	2.5	50	90900	
IRF624S	250	1.1	4.4	2.8	2.5	50	91004	
IRF630S	200	0.4	9	5.7	1.7	74	90901	
IRF634S	250	0.45	8.1	5.1	1.7	74	91005	
IRF640S	200	0.18	18	11	1	125	90902	
IRF644S	250	0.28	14	8.5	1	125	91006	
IRF710S	400	3.6	2	1.2	3.5	36	91007	
IRF720S	400	1.8	3.3	2.1	2.5	50	91008	
IRF730S	400	1	5.5	3.3	1.7	74	91009	
IRF740S	400	0.55	10	6.3	1	125	91010	
IRF820S	500	3	2.5	1.6	2.5	50	91011	
IRF830S	500	1.5	4.5	2.9	1.7	74	91012	
IRF840S	500	0.85	8	5.1	1	125	91013	
IRFZ14S	60	0.2	10	7.2	3.5	43	90890	
IRFZ24NS	55	0.07	17	12	3.3	45	91355	
IRFZ34NS	55	0.04	26	18	2.7	56	91311	
IRFZ34S	60	0.05	30	21	1.7	88	90892	
IRFZ44N	55	0.024	41	29	1.8	83	91303	
IRFZ44NS	60	0.028	50	36	1	150	91315	
IRFZ46NS	55	0.02	46	33	1.7	88	91305	
IRFZ48NS	60	0.016	53	37	1.6	3.8	91408	
IRL2505S	55	0.008	90	64	1	2.1	91326	
IRL2703S	30	0.04	24	17	3.3	130	91360	
IRL530NS	100	0.1	15	11	2.4	63	91349	

HEXFET® Power MOSFETs

International
IOR Rectifier

Part Number	$V_{(BR)DSS}$ Drain-to-Source Breakdown Voltage (V)	$R_{DS(on)}$ On-State Resistance (Ω)	I_D Continuous Drain Current 25°C (A)	I_D Continuous Drain Current 100°C (A)	$R_{\theta JC}$ Max Thermal Resistance (°C/W)	P_D Max. Power Dissipation @ T_C = 25°C (W)	Fax-on-Demand	Case Outline
Surface Mount							D²Pak	
IRL620S	200	0.8	5.2	3.3	2.5	50	91218	H6
N-Channel		*Logic Level*						
IRL2203NS	30	0.007	100	71	1.2	130	91367	H6
IRL3103S	30	0.014	56	40	1.8	83	91338	
IRL3303S	30	0.026	34	24	2.7	56	91323	
IRL3705NS	55	0.01	77	54	1.2	3.8	91502	
IRL3803S	30	0.006	120	83	1	150	91319	
IRL510S	100	0.54	5.6	4	3.5	43	90907	
IRL520S	100	0.27	9.2	6.5	2.5	60	90896	
IRLZ14S	60	0.2	10	7.2	3.5	43	90903	
IRLZ24NS	55	0.06	18	13	3.3	45	91358	
IRLZ34NS	55	0.035	27	19	2.7	56	91308	
IRLZ34S	60	0.05	30	21	1.7	88	90905	
IRLZ44NS	55	0.022	41	29	1.8	83	91347	
P-Channel								
IRF4905S	-55	0.02	-64	-45	1	150	91478	H6
IRF5210S	-100	0.06	-35	-25	1	150	91405	
IRF9510S	-100	1.2	-4	-2.8	3.5	43	90914	
IRF9520S	-100	0.6	-6.8	-4.8	2.5	60	90915	
IRF9530S	-100	0.3	-12	-8.2	1.7	88	90916	
IRF9540S	-100	0.2	-19	-13	1	150	90917	
IRF9610S	-200	3	-1.8	-1	6.4	20	90918	
IRF9620S	-200	1.5	-2.5	-2	3.1	40	90919	
IRF9630S	-200	0.8	-6.5	-4	1.7	74	90920	
IRF9640S	-200	0.5	-11	-6.8	1	125	90921	
IRF9Z14S	-60	0.5	-6.7	-4.7	3.5	43	90911	

Part Number	$V_{(BR)DSS}$ Drain-to-Source Breakdown Voltage (V)	$R_{DS(on)}$ On-State Resistance (Ω)	I_D Continuous Drain Current 25°C (A)	$R_{\theta JC}$ Max Thermal Resistance (°C/W)	P_D Max. Power Dissipation @ T C = 25°C (W)	Qg Total Gate Charge (nC)	Fax-on-Demand	Case Outline
Discrete							TO-220AB	
N-Channel		*Low Charge*						
IRF737LC	300	0.75	6.1	1.7	74	3.9	91314	H12
IRF740LC	400	0.55	10	1	125	39	91068	
IRF840LC	500	0.85	8	1	125	39	91069	
IRFBC40LC	600	1.2	6.2	1	125	39	91070	

Discrete

TO-220AB

Part Number	$V_{(BR)DSS}$ Drain-to-Source Breakdown Voltage (V)	$R_{DS(on)}$ On-State Resistance (Ω)	I_D Continuous Drain Current 25°C (A)	I_D Continuous Drain Current 100°C (A)	$R_{\theta JC}$ Max Thermal Resistance (°C/W)	P_D Max. Power Dissipation @ T_C = 25°C (W)	Fax-on-Demand	Case Outline
N-Channel	*FETKY (Co-packaged HEXFET Power MOSFET and Schottky Diode)*							
IRL3103D1	30	0.014	54	34	1.8	2	91608	H12
N-Channel								
IRF1010N	55	0.012	72	51	1.2	130	91278	H12
IRF1310N	100	0.036	36	25	1.3	120	91611	
IRF3205	55	0.008	98	69	1	150	91279	
IRF3415	150	0.042	37	26	1	150	91477	
IRF3710	100	0.028	46	33	1	150	91309	
IRF510	100	0.54	5.6	4	3.5	43	90325	
IRF520N	100	0.2	9.5	6.7	9.5	47	91339	
IRF530N	100	0.11	15	11	2.4	60	91351	
IRF540N	100	0.052	27	19	1.6	94	91341	
IRF610	200	1.5	3.3	2.1	3.5	36	90326	
IRF614	250	2	2.7	1.7	3.5	36	90475	
IRF620	200	0.8	5.2	3.3	2.5	50	90317	
IRF624	250	1.1	4.4	2.8	2.5	50	90472	
IRF630	200	0.4	9	5.7	1.7	74	90309	
IRF634	250	0.45	8.1	5.1	1.7	74	90476	
IRF640	200	0.18	18	11	1	125	90374	
IRF644	250	0.28	14	8.5	1	125	90527	
IRF710	400	3.6	2	1.2	3.5	36	90327	
IRF720	400	1.8	3.3	2.1	2.5	50	90315	
IRF730	400	1	5.5	3.3	1.7	74	90308	
IRF734	450	1.2	4.9	3.1	1.7	74	90999	
IRF740	400	0.55	10	6.3	1	125	90375	
IRF744	450	0.63	8.8	5.6	1	125	91000	
IRF820	500	3	2.5	1.6	2.5	50	90324	
IRF830	500	1.5	4.5	2.9	1.7	74	90311	
IRF840	500	0.85	8	5.1	1	125	90376	
IRFBC20	600	4.4	2.2	1.4	2.5	50	90623	
IRFBC30	600	2.2	3.6	2.3	1.7	74	90482	
IRFBC40	600	1.2	6.2	3.9	1	125	90506	
IRFBE20	800	6.5	1.8	1.2	2.3	54	90610	
IRFBE30	800	3	4.1	2.6	2	125	90613	
IRFBF20	900	8	1.7	1.1	2.3	54	90607	
IRFBF30	900	3.7	3.6	2.3	1	125	90616	
IRFBG20	1000	11	1.4	0.86	2.3	54	90604	
IRFBG30	1000	5	3.1	2	1	125	90620	

Part Number	$V_{(BR)DSS}$ Drain-to-Source Breakdown Voltage (V)	$R_{DS(on)}$ On-State Resistance (Ω)	I_D Continuous Drain Current 25°C (A)	I_D Continuous Drain Current 100°C (A)	$R_{\theta JC}$ Max Thermal Resistance (°C/W)	P_D Max. Power Dissipation @ T_C = 25°C (W)	Fax-on-Demand	Case Outline
Discrete							TO-220AB	
IRFZ14	60	0.2	10	7.2	3.5	43	90507	H12
IRFZ24N	55	0.07	17	12	3.3	45	91354	
IRFZ46N	55	0.02	46	33	1.7	88	91277	
IRFZ48N	55	0.016	53	37	1.6	94	91406	
N-Channel	*Logic Level*							
IRL2203N	30	0.007	100	71	1.2	130	91366	H12
IRL3103	30	0.014	56	40	1.8	83	91337	
IRL3303	30	0.026	34	24	2.7	56	91322	
IRL3705N	55	0.01	77	54	1.2	130	91370	
IRL3803	30	0.006	120	83	1	150	91301	
IRL520N	100	3.2	10	7.1	3.2	47	91494	
IRL530N	100	0.1	15	11	2.4	63	91348	
IRL540N	100	0.044	30	21	1.6	94	91495	H7
IRL640	200	0.18	17	11	1	125	91089	H12
IRLI2203N	30	0.007	61	43	3.2	47	91378	
IRLZ14	60	0.2	10	7.2	3.5	43	90556	
IRLZ24N	55	0.06	18	13	3.3	45	91357	
IRLZ34N	55	0.035	27	19	2.7	56	91307	
IRLZ44N	55	0.022	41	29	1.8	83	91346	
P-Channel								
IRF4905	-55	0.02	-64	-45	1	150	91280	H12
IRF9510	-100	1.2	-4	-2.8	3.5	43	90390	
IRF9520	-100	0.6	-6.8	-4.8	2.5	60	90319	
IRF9530N	-100	0.2	-13	-9.2	2	75	91482	
IRF9540N	-100	0.117	-19	-13	1.6	94	91437	
IRF9610	-200	3	-1.8	-1	6.4	20	90350	
IRF9620	-200	1.5	-2.5	-2	3.1	40	90351	
IRF9630	-200	0.8	-6.5	-4	1.7	74	90352	
IRF9640	-200	0.5	-11	-6.8	1	125	90422	
IRF9Z14	-60	0.5	-6.7	-4.7	3.5	43	90736	
IRF9Z24N	-55	0.175	-12	-8.5	3.3	45	91484	
IRF9Z34N	-55	0.1	-17	-12	2.7	56	92001	

Fully Isolated

TO-220 FullPak

Part Number	$V_{(BR)DSS}$ Drain-to-Source Breakdown Voltage (V)	$R_{DS(on)}$ On-State Resistance (Ω)	I_D Continuous Drain Current 25°C (A)	$R_{\theta JC}$ Max Thermal Resistance (°C/W)	P_D Max. Power Dissipation @ T C = 25°C (W)	Qg Total Gate Charge (nC)	Fax-on-Demand	Case Outline
N-Channel		*Low Charge*						
IRFI740GLC	400	0.55	6	3.1	40	39	91209	H7
IRFI840GLC	500	0.85	4.8	3.1	40	39	91208	
IRFIBC40GLC	600	1.2	4	3.1	40	39	91211	

Fully Isolated

TO-220 Full-Pak

Part Number	$V_{(BR)DSS}$ Drain-to-Source Breakdown Voltage (V)	$R_{DS(on)}$ On-State Resistance (Ω)	I_D Continuous Drain Current 25°C (A)	I_D Continuous Drain Current 100°C (A)	$R_{\theta JC}$ Max Thermal Resistance (°C/W)	P_D Max. Power Dissipation @ T_C = 25°C (W)	Fax-on-Demand	Case Outline
N-Channel								
IRFI1010N	55	0.012	44	31	3.2	47	91373	H7
IRFI1310N	100	0.036	22	16	3.3	45	91611	
IRFI3205	55	0.008	56	40	3.1	48	91374	
IRFI510G	100	0.54	4.5	3.2	5.5	27	90829	
IRFI520N	100	0.2	7.2	5.1	5.5	27	91362	
IRFI530N	100	0.11	11	7.8	4.5	33	91353	
IRFI540N	100	0.052	18	13	3.6	42	91361	
IRFI614G	250	2	2.1	1.3	5.5	23	90831	
IRFI620G	200	0.8	4.1	2.6	4.1	30	90832	
IRFI624G	250	1.1	3.4	2.2	4.1	30	90833	
IRFI630G	200	0.4	5.9	3.7	3.6	32	90652	
IRFI634G	250	0.45	5.6	3.5	3.6	32	90738	
IRFI640G	200	0.18	9.8	6.2	3.1	40	90649	
IRFI644G	250	0.28	7.9	5	3.1	40	90739	
IRFI720G	400	1.8	2.6	1.7	4.1	30	90834	
IRFI730G	400	1	3.7	2.3	3.6	32	90650	
IRFI734G	450	1.2	3.4	2.1	3.6	35	91001	
IRFI740G	400	0.55	5.4	3.4	3.1	40	90651	
IRFI744G	450	0.63	4.9	3.1	3.1	40	91002	
IRFI820G	500	3	2.1	1.3	4.1	30	90641	
IRFI830G	500	1.5	3.1	2	3.6	32	90646	
IRFI840G	500	0.85	4.6	2.9	3.1	40	90642	
IRFIBC20G	600	4.4	1.7	1.1	4.1	30	90850	
IRFIBC30G	600	2.2	2.5	1.6	3.6	35	90851	
IRFIBC40G	600	1.2	3.5	2.2	3.1	40	90852	
IRFIBE20G	800	6.5	1.4	0.86	4.1	30	90853	
IRFIBE30G	800	3	2.1	1.4	3.6	35	90854	
IRFIBF20G	900	8	1.2	0.79	4.1	30	90855	
IRFIBF30G	900	3.7	1.9	1.2	3.6	35	90856	
IRFIZ14G	60	0.2	8	5.7	5.5	27	90859	
IRFIZ24N	55	0.07	13	9.2	5.8	26	91501	
IRFIZ34N	55	0.04	19	13	4.8	31	91489	
IRFIZ44N	55	0.024	28	20	0.024	38	91403	
IRFIZ46N	55	0.02	31	22	3.8	40	91306	
IRFIZ48N	55	0.016	36	25	3.6	42	91407	
N-Channel	*Logic Level*							
IRLI3705N	55	0.01	47	33	3.2	47	91369	H7

Part Number	$V_{(BR)DSS}$ Drain-to-Source Breakdown Voltage (V)	$R_{DS(on)}$ On-State Resistance (Ω)	I_D Continuous Drain Current 25°C (A)	I_D Continuous Drain Current 100°C (A)	$R_{\theta JC}$ Max Thermal Resistance (°C/W)	P_D Max. Power Dissipation @ T_C = 25°C (W)	Fax-on-Demand	Case Outline
Fully Isolated							TO-220 FullPak	
IRLI3803	30	0.006	67	47	3.1	48	91320	H7
IRLI520N	100	0.18	7.7	5.4	5.5	27	91496	
IRLI530G	100	0.16	9.7	6.9	3.6	42	90844	
IRLI540N	100	0.044	20	14	3.6	42	91497	
IRLI620G	200	0.8	4.1	2.6	4.1	30	91235	
IRLI630G	200	0.4	5.9	3.7	3.6	32	91236	
IRLI640G	200	0.18	9.8	6.2	3.1	40	91237	
IRLIZ14G	60	0.2	8	5.7	5.5	27	90846	
IRLIZ24G	60	0.1	14	10	4.1	37	90847	
IRLIZ24N	55	0.06	14	9.9	5.8	26	91344	
IRLIZ34N	55	0.035	20	14	4.8	31	91329	
IRLIZ44N	55	0.022	28	20	4	38	91498	
P-Channel								
IRFI9540G	-100	0.117	-13	-9.2	3.6	42	90837	H7
IRFI9634G	-250	1	-4.1	-2.6	3.6	35	91488	
P-Channel		*Logic Level*						
IRFI9520G	-100	0.6	-5.2	-3.6	4.1	37	90835	H7
IRFI9530G	-100	0.03	-7.7	-5.4	3.6	38	90836	
IRFI9620G	-200	1.5	-3	-1.9	4.1	30	90874	
IRFI9630G	-200	0.8	-4.3	-2.7	3.6	40	90838	
IRFI9640G	-200	0.5	-6.1	-3.9	3.1	40	90839	
IRFI9Z14G	-60	0.5	-5.3	-3.8	5.5	27	90840	
IRFI9Z24G	-60	0.285	-8.5	-6	4.1	37	90841	
IRFI9Z34G	-60	0.14	-12	8.5	3.6	38	90842	

HEXSENSE

TO-220 Hexsense

Part Number	$V_{(BR)DSS}$ Drain-to-Source Breakdown Voltage (V)	$R_{DS(on)}$ On-State Resistance (Ω)	I_D Continuous Drain Current 25°C (A)	$R_{\theta JC}$ Max Thermal Resistance (°C/W)	P_D Max. Power Dissipation @ T C = 25°C (W)	Nominal Sense Number	Fax-on-Demand	Case Outline
N-Channel								
IRC530	100	0.16	14	1.7	88	1540	90454	H8
IRC540	100	0.077	28	1	150	2810	90592	
IRC630	200	0.4	9	1.7	74	1570	90565	
IRC634	250	0.45	8.1	1.7	74	1580	90566	
IRC640	200	0.18	18	1	125	2880	90568	
IRC644	250	0.28	14	1	125	2900	90569	
IRC730	400	1	5.5	1	74	1600	90567	
IRC740	400	0.55	10	1	125	2940	90570	
IRC830	500	1.5	4.5	1.7	74	1600	90455	
IRC840	500	0.85	8	1	125	2970	90593	
IRCZ24	60	0.1	17	2.5	60	820	90615	
IRCZ34	60	0.05	30	1.7	88	1480	90590	
IRCZ44	60	0.028	50	1	150	2720	90529	

Discrete

TO-247AC

Part Number	$V_{(BR)DSS}$ Drain-to-Source Breakdown Voltage (V)	$R_{DS(on)}$ On-State Resistance (Ω)	I_D Continuous Drain Current 25°C (A)	$R_{\theta JC}$ Max Thermal Resistance (°C/W)	P_D Max. Power Dissipation @ T C = 25°C (W)	Qg Total Gate Charge (nC)	Fax-on-Demand	Case Outline
N-Channel		*Low Charge*						
IRFP350LC	400	0.3	18	0.65	190	70	91229	H13
IRFP360LC	400	0.2	23	0.45	280	98	91230	
IRFP450LC	500	0.4	16	0.65	190	70	91231	
IRFP460LC	500	0.27	20	0.45	280	98	91232	
IRFPC50LC	600	0.6	13	0.65	190	70	91233	
IRFPC60LC	600	0.4	16	0.45	280	98	91234	

HEXFET® Power MOSFETs

International
IOR Rectifier

Discrete

TO-247AC

Part Number	$V_{(BR)DSS}$ Drain-to-Source Breakdown Voltage (V)	$R_{DS(on)}$ On-State Resistance (Ω)	I_D Continuous Drain Current 25°C (A)	I_D Continuous Drain Current 100°C (A)	$R_{\theta JC}$ Max Thermal Resistance (°C/W)	P_D Max. Power Dissipation @ T_C = 25°C (W)	Fax-on-Demand	Case Outline
N-Channel								
IRFP044N	55	0.02	49	35	1.5	100	91410	H13
IRFP048N	55	0.016	62	44	1.2	130	91409	
IRFP054N	55	0.012	72	51	1.2	130	91382	
IRFP064N	55	0.008	98	69	1	150	91383	
IRFP140N	100	0.052	27	19	1.6	94	91343	
IRFP150N	100	0.036	39	28	1.1	140	91503	
IRFP240	200	0.18	20	12	0.83	150	90444	
IRFP244	250	0.28	15	9.7	0.83	150	90588	
IRFP250	200	0.085	30	19	0.65	190	90443	
IRFP254	250	0.14	23	15	0.65	190	90540	
IRFP260	200	0.055	46	29	0.45	280	90755	
IRFP264	250	0.075	38	24	0.45	280	90756	
IRFP340	400	0.55	11	6.9	0.83	150	90456	
IRFP344	450	0.63	9.5	6	0.83	150	90998	
IRFP350	400	0.3	16	10	0.65	190	90445	
IRFP354	450	0.35	14	9.1	0.65	190	90995	
IRFP360	400	0.2	23	14	0.45	280	90586	
IRFP3710	100	0.028	51	36	0.83	180	91490	
IRFP440	500	0.85	8.8	5.6	0.83	150	90457	
IRFP448	500	0.6	11	6.6	0.7	180	90595	
IRFP450	500	0.4	14	8.7	0.65	190	90458	
IRFP460	500	0.27	20	13	0.45	280	90512	
IRFPC30	600	2.2	4.3	2.7	1.2	100	90596	
IRFPC40	600	1.2	6.8	4.3	0.83	150	90511	
IRFPC48	600	0.82	8.9	5.6	0.73	170	90996	
IRFPC50	600	0.6	11	7	0.65	180	90656	
IRFPC60	600	0.4	16	10	0.45	280	90870	
IRFPE30	800	3	4.1	2.6	1	125	90612	
IRFPE40	800	2	5.4	3.4	0.83	150	90578	
IRFPE50	800	1.2	7.8	4.9	0.65	190	90573	
IRFPF30	900	3.7	3.6	2.3	1	125	90618	
IRFPF40	900	2.5	4.7	2.9	0.83	150	90580	
IRFPF50	900	1.6	6.7	4.2	0.65	190	90542	
IRFPG30	1000	5	3.1	2	1	125	90621	
IRFPG40	1000	3.5	4.3	2.7	0.83	150	90576	
IRFPG50	1000	2	6.1	3.9	0.65	190	90543	

Discrete

TO-247AC

Part Number	$V_{(BR)DSS}$ Drain-to-Source Breakdown Voltage (V)	$R_{DS(on)}$ On-State Resistance (Ω)	I_D Continuous Drain Current 25°C (A)	I_D Continuous Drain Current 100°C (A)	$R_{\theta JC}$ Max Thermal Resistance (°C/W)	P_D Max. Power Dissipation @ T_C = 25°C (W)	Fax-on-Demand	Case Outline
P-Channel								
IRFP9140	-100	0.2	-21	-15	0.83	180	90480	H13
IRFP9240	-200	0.5	-12	-7.5	0.83	150	90481	

HEXFET® Power MOSFET

International
IOR Rectifier

HEX-Pak Module

TO-240AA

Part Number	$V_{(BR)DSS}$ Drain-to-Source Breakdown Voltage (V)	$R_{DS(on)}$ On-State Resistance (Ω)	I_D Continuous Drain Current 25°C (A)	I_{DM} Pulse Drain Current 100°C (A)	$R_{\theta JC}$ Max Thermal Resistance (°C/W)	P_D Max. Power Dissipation (W)	Fax-on-Demand	Case Outline
N-Channel		*Parallel Chip*						
IRFK4H054	60	0.005	150	960	0.25	500		H14
IRFK4H150	100	0.014	145	580	0.25	500		
IRFK4H250	200	0.021	108	432	0.25	500		
IRFK4H350	400	0.075	50	200	0.25	500		
IRFK4H450	500	0.1	44	176	0.25	500		
IRFK4HC50	600	0.175	35	140	0.25	500		
IRFK4HE50	800	0.3	26	104	0.25	500		
IRFK4J054	60	0.005	150	960	0.25	500		
IRFK4J150	100	0.014	145	580	0.25	500		
IRFK4J250	200	0.021	108	432	0.25	500		
IRFK4J350	400	0.075	50	200	0.25	500		
IRFK4J450	500	0.1	44	176	0.25	500		
IRFK4JC50	600	0.175	35	140	0.25	500		
IRFK4JE50	800	0.3	26	104	0.25	500		
IRFK6H054	60	0.003	350	1400	0.2	625		
IRFK6H150	100	0.01	150	720	0.2	625		
IRFK6H250	200	0.015	140	560	0.2	625		
IRFK6H350	400	0.05	75	300	0.2	625		
IRFK6H450	500	0.067	66	264	0.2	625		
IRFK6HC50	600	0.1	48	192	0.2	625		
IRFK6J054	60	0.003	350	1400	0.2	625		
IRFK6J150	100	0.01	150	720	0.2	625		
IRFK6J250	200	0.015	140	560	0.2	625		
IRFK6J350	400	0.05	75	300	0.2	625		
IRFK6J450	500	0.067	66	264	0.2	625		
IRFK6JC50	600	0.1	48	192	0.2	625		

HEX-Pak Module

TO-240AA

Part Number	$V_{(BR)DSS}$ Drain-to-Source Breakdown Voltage (V)	$R_{DS(on)}$ On-State Resistance (Ω)	I_D Continuous Drain Current 25°C (A)	I_{DM} Pulse Drain Current 100°C (A)	$R_{\theta JC}$ Max Thermal Resistance (°C/W)	P_D Max. Power Dissipation (W)	Fax-on-Demand	Case Outline
N-Channel	*Half Bridge*							
IRFK2D054	60	0.01	120	480	0.25	500		H15
IRFK2D150	100	0.028	72	288	0.25	500		
IRFK2D250	200	0.043	54	216	0.25	500		
IRFK2D350	400	0.15	25	100	0.25	500		
IRFK2D450	500	0.2	22	88	0.25	500		
IRFK2DC50	600	0.35	18	72	0.25	500		
IRFK2DE50	800	0.6	12	48	0.25	500		
IRFK2F054	60	0.01	120	480	0.25	500		
IRFK2F150	100	0.028	72	288	0.25	500		
IRFK2F250	200	0.043	54	216	0.25	500		
IRFK2F350	400	0.15	25	100	0.25	500		
IRFK2F450	500	0.2	22	88	0.25	500		
IRFK2FC50	600	0.35	18	72	0.25	500		
IRFK2FE50	800	0.6	12	48	0.25	500		
IRFK3D150	100	0.02	125	435	0.2	625		
IRFK3D250	200	0.03	70	280	0.2	625		
IRFK3D350	400	0.1	37	148	0.2	625		
IRFK3D450	500	0.135	33	132	0.2	625		
IRFK3DC50	600	0.23	24	96	0.2	625		
IRFK3F150	100	0.02	125	435	0.2	625		
IRFK3F250	200	0.03	70	280	0.2	625		
IRFK3F350	400	0.1	37	148	0.2	625		
IRFK3F450	500	0.135	33	132	0.2	625		
IRFK3FC50	600	0.23	24	96	0.2	625		

HEXFET® Die

HEX Size	Part Number	V_{DS}	$R_{DS(on)}$ max.	Die Outline Figure	Recommended Source Bonding Wire mils	mm	Equivalent Device Type
N-Channel							
4.1	IRFC048	60	0.018	D24	20	0.15	IRFZ48
4	IRFCE40	800	2	D23	10	0.25	IRFPE40
3	IRFC430	500	1.5	D15	8	0.2	IRF830
3	IRFCC30	600	2.2	D16	8	0.2	IRFBC30
3	IRFCE30	800	3.2	D17	10	0.25	IRFBE30
3	IRFCF30	900	4	D17	10	0.25	IRFBF30
3	IRFC234	250	0.45	D14	8	0.2	IRF634
4	IRFC044	60	0.028	D19	20	0.15	IRFZ44
3	IRFC230	200	0.4	D14	8	0.2	IRF630
4	IRFC140	100	0.077	D20	15	0.38	IRF540
4	IRFC240	200	0.18	D21	15	0.38	IRF640
4	IRFC244	250	0.28	D21	15	0.38	IRF644
4	IRFC340	400	0.55	D22	12	0.3	IRF740
4	IRFC440	500	0.85	D22	12	0.3	IRF840
4.5	IRFC448	500	0.6	D25	12	0.3	IRFP448
1	IRFC014	60	0.2	D2	5	0.13	IRFZ14
3	IRFCG30	1000	5.6	D17	10	0.25	IRFBG30
2	IRFC224	250	1.1	D8	8	0.2	IRF624
1	IRFC110	100	0.54	D3	5	0.13	IRF510
1	IRFC210	200	1.5	D4	5	0.13	IRF610
1	IRFC214	250	2	D4	5	0.13	IRF614
1	IRFC310	400	3.6	D5	5	0.13	IRF710
2	IRFC024	60	0.1	D6	10	0.25	IRFZ24
3	IRFC330	400	1	D15	8	0.2	IRF730
2	IRFC220	200	0.8	D8	8	0.2	IRF620
4	IRFCF40	900	2.5	D23	10	0.25	IRFPF40
2	IRFC320	400	1.8	D9	8	0.2	IRF720
2	IRFC420	500	3	D9	8	0.2	IRF820
2	IRFCC20	600	4.4	D10	8	0.2	IRFBC20
2	IRFCE20	800	6.5	D11	5	0.13	IRFBE20
2	IRFCF20	900	8	D11	5	0.13	IRFBF20
2	IRFCG20	1000	11.5	D11	5	0.13	IRFBG20
3	IRFC034	60	0.05	D12	15	0.38	IRFZ34
3	IRFC130	100	0.16	D13	10	0.25	IRF530
2	IRFC120	100	0.27	D7	8	0.2	IRF520
5	IRFCG50	1000	2	D29	10	0.25	IRFPG50
4	IRFCC40	600	1.2	D22	12	0.3	IRFBC40
6	IRFC460	500	0.27	D32	25	0.64	IRFP460
6	IRFC360	400	0.2	D32	25	0.64	IRFP360
6	IRFC264	250	0.075	D31	25	0.64	IRFP264
6	IRFC064	60	0.009	D30	25	0.64	IRFP064

Common Characteristics: IDSS @ VDS 250µA
500nA
VGS(th) Standard gate: min 2V, max 4V with VDS=VGS, ID=250µA
VGS(th) Logic level: min 1V. max 2V with VDS=VGS. ID=250uA
RDS(on) Standard gate: measured @ VGS=10V
Logic level: measured @ VGS=5V

HEXFET® Die

HEX Size	Part Number	V_{DS}	$R_{DS(on)}$ max.	Die Outline Figure	Recommended Source Bonding Wire mils	mm	Equivalent Device Type
5	IRFCF50	900	1.6	D29	10	0.25	IRFPF50
5	IRFCE50	800	1.2	D29	10	0.25	IRFPE50
5	IRFCC50	600	0.6	D28	20	0.51	IRFPC50
5	IRFC450	500	0.4	D27	20	0.51	IRFP450
5	IRFC350	400	0.3	D27	20	0.51	IRFP350
5	IRFC254	250	0.14	D27	20	0.51	IRFP254
5	IRFC250	200	0.085	D27	20	0.51	IRFP250
5	IRFC150	100	0.055	D27	20	0.51	IRFP150
5	IRFC054	60	0.014	D26	25	0.64	IRFP054
4	IRFCG40	1000	3.5	D23	10	0.25	IRFPG40
6	IRFC260	200	0.055	D31	25	0.64	IRFP260
P-Channel							
1	IRFC9110	-100	1.2	D34	5	0.13	IRF9510
3	IRFC9034	-60	0.14	D39	12	0.3	IRF9Z34
4	IRFC9240	-200	0.5	D43	15	0.38	IRF9640
4	IRFC9140	-100	0.2	D42	15	0.38	IRF9540
3	IRFC9230	-200	0.8	D41	8	0.2	IRF9630
3	IRFC9130	-100	0.3	D40	10	0.25	IRF9530
2	IRFC9220	-200	1.5	D38	8	0.2	IRF9620
2	IRFC9120	-100	0.6	D37	8	0.2	IRF9520
1	IRFC9210	-200	3	D35	5	0.13	IRF9610
1	IRFC9014	-60	0.5	D33	5	0.13	IRFR9014
2	IRFC9024	-60	0.28	D36	10	0.25	IRF9Z24
Logic Level							
N-Channel							
4	IRLC140	100	0.077	D20	15	0.38	IRL540
1	IRLC014	60	0.2	D2	5	0.13	IRLZ14
1	IRLC110	100	0.54	D3	5	0.13	IRL510
2	IRLC024	60	0.1	D6	10	0.25	IRLZ24
2	IRLC120	100	0.27	D7	8	0.2	IRL520
3	IRLC034	60	0.05	D12	15	0.38	IRLZ34
3	IRLC130	100	0.16	D13	10	0.25	IRL530
4	IRLC044	60	0.028	D18	20	0.51	IRLZ44

Common Characteristics: IDSS @ VDS 250μA
500nA
VGS(th) Standard gate: min 2V, max 4V with VDS=VGS, ID=250μA
VGS(th) Logic level: min 1V. max 2V with VDS=VGS. ID=250uA
RDS(on) Standard gate: measured @ VGS=10V
Logic level: measured @ VGS=5V

HEXSENSE Die

HEX Size	Part Number	V_{DS}	$R_{DS(on)}$ max.	Die Outline	Figure	Recommended Source Bonding Wire mils	mm	Equivalent Device Type
N-Channel								
5	IRCC054	60	0.014	2200	D49	25	0.64	IRCP054
4	IRCC440	500	0.85	2780	D48	12	0.3	IRC840
4	IRCC340	400	0.55	2800	D48	12	0.3	IRC740
4	IRCC244	250	0.28	2770	D48	15	0.38	IRC644
4	IRCC240	200	0.18	2740	D48	15	0.38	IRC640
4	IRCC140	100	0.077	2680	D48	15	0.38	IRC540
4	IRCC044	60	0.028	2590	D47	20	0.51	IRCZ44
3	IRCC430	500	1.5	1520	D46	8	0.2	IRC830
3	IRCC330	400	1	1525	D46	8	0.2	IRC730
3	IRCC234	250	0.45	1490	D46	8	0.2	IRC634
3	IRCC230	200	0.4	1490	D46	8	0.2	IRC630
3	IRCC130	100	0.16	1430	D46	10	0.25	IRC530
3	IRCC034	60	0.05	1410	D45	15	0.38	IRCZ34
2	IRCC024	60	0.1	780	D44	10	0.25	IRCZ24

Common Characteristics: IDSS @ VDS 250µA
500nA
VGS(th) Standard gate: min 2V, max 4V with VDS=VGS, ID=250µA
VGS(th) Logic level: min 1V. max 2V with VDS=VGS. ID=250uA
RDS(on) Standard gate: measured @ VGS=10V
Logic level: measured @ VGS=5V

IGBT Selection Guide

Circuit A Single Switch (w/o diode)

International
IOR Rectifier

500 Volts

Current Rating (A)	Part Number
11-15	IRGB420U
21-25	IRGB430U
	IRGP430U
31-40	IRGB440U
	IRGP440U
51-60	IRGP450U

600 Volts

Current Rating (A)	Part Number
5 - 10	IRGBC20K
	IRGBC20K-S
11-15	IRG4PC20U
	IRG4BC20U
	IRG4BC20UD
	IRGBC20M
16-20	IRGBC20F
	IRGBC20S
21-25	IRG4BC30U
	IRG4PC30U
	IRGBC30K
	IRGBC30K-S
	IRGPC30K
26-30	IRGBC30M
31-40	IRGPC30S
	IRG4BC40U
	IRG4PC40U
	IRG4BC30F
	IRG4PC30F
	IRGBC30S
	IRGBC40M
41-50	IRGBC40K
	IRGBC40K-S
	IRGPC40K
	IRG4BC40F
	IRG4PC40F
51-60	IRG4PC40S
	IRGPC50K
	IRG4PC50U
	IRG4BC40S
61-70	IRG4PC50F
	IRGPC50S
	IRGPC60K
301-400	IRGDDN300K06
	IRGDDN300M06
501-600	IRGDDN400K06
	IRGDDN400M06
601-1000	IRGDDN600M06
	IRGDDN600K06

900 Volts

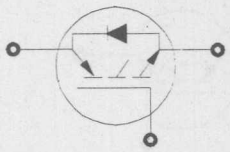
Current Rating (A)	Part Number
5 - 10	IRGBF20F
	IRGPF20F
16-20	IRGBF30F
	IRGPF30F
31-40	IRGPF40F
51-60	IRGPF50F

1200 Volts

Current Rating (A)	Part Number
5 - 10	IRGPH20M
16-20	IRGPH40K
26-30	IRGPH40F
31-40	IRGPH50K
	IRGPH40M
41-50	IRGPH50M
	IRGPH50F

IGBT Selection Guide

Circuit B Single Switch (w/ diode)



International
IOR Rectifier

500 Volts

Current Rating (A)	Part Number
11-15	IRGB420UD2
21-25	IRGP430UD2
	IRGB430UD2
31-40	IRGP440UD2
51-60	IRGP450UD2

600 Volts

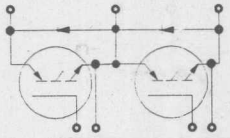
Current Rating (A)	Part Number
5 - 10	IRGPC20KD2
	IRGBC20KD2
	IRGBC20KD2-S
11-15	IRGBC20MD2-S
	IRGPC20MD2
	IRGBC20M-S
	IRGBC20MD2
16-20	IRGBC20FD2
21-25	IRG4BC30UD
	IRG4PC30UD
	IRGBC30KD2
	IRGBC30KD2-S
	IRGBC30UD2
	IRGPC30KD2
26-30	IRGBC30M-S
	IRGBC30MD2
	IRGBC30MD2-S
	IRGPC30M
	IRGPC30MD2
31-40	IRGBC40M-S
	IRG4PC40UD
	IRG4PC30FD
	IRGPC40M
	IRGPC40MD2
	IRG4BC30FD
41-50	IRGPC40KD2
	IRG4PC40FD
51-60	IRGPC50KD2
	IRG4PC50UD
	IRGPC50UD2
	IRGPC50M
	IRGPC50MD2
61-70	IRGPC60M
	IRG4PC50FD
301-400	IRGRDN300K06
	IRGRDN300M06
501-600	IRGRDN400M06
	IRGRDN400K06
601-1000	IRGRDN600M06
	IRGRDN600K06

1200 Volts

Current Rating (A)	Part Number
11-15	IRGPH30MD2
16-20	IRGPH40KD2
26-30	IRGPH40FD2
31-40	IRGPH40MD2
	IRGPH50KD2
41-50	IRGPH50MD2
	IRGPH50FD2

IGBT Selection Guide

Circuit E Half Bridge



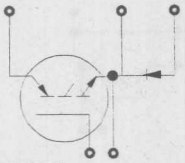
International
IOR Rectifier

600 Volts	
Current Rating (A)	Part Number
126-150	IRGTI115U06
	IRGTIN100K06
	IRGTIN100M06
151-175	IRGTI165F06
	IRGTDN150K06
	IRGTI140U06
	IRGTIN150K06
176-200	IRGTI200F06
	IRGTIN150M06
201-300	IRGTDN200K06
	IRGTDN200M06
301-400	IRGTDN300K06
	IRGTDN300M06

1200 Volts	
Current Rating (A)	Part Number
71-100	IRGTIN050M12
126-150	IRGTIN075M12
151-175	IRGTIN100M12

IGBT Selection Guide

Circuit F Chopper Low Side Switch



International
IOR Rectifier

600 Volts

Current Rating (A)	Part Number
126-150	IRGKI115U06
	IRGKIN100K06
	IRGKIN100M06
151-175	IRGKI165F06
	IRGKI140U06
	IRGKIN150K06
176-200	IRGKI200F06
	IRGKIN150M06

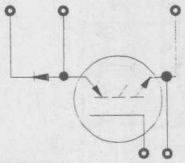
1200 Volts

Current Rating (A)	Part Number
71-100	IRGKIN050M12
126-150	IRGKIN075M12
151-175	IRGKIN100M12

IGBT Selection Guide

International
IOR Rectifier

Circuit G Chopper High Side Switch

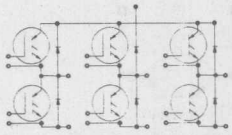


600 Volts	
Current Rating (A)	**Part Number**
126-150	IRGNI115U06
	IRGNIN100K06
	IRGNIN100M06
151-175	IRGNI140U06
	IRGNIN150K06
	IRGNI165F06
176-200	IRGNIN150M06
	IRGNI200F06

1200 Volts	
Current Rating (A)	**Part Number**
71-100	IRGNIN050M12
126-150	IRGNIN075M12
151-175	IRGNIN100M12

IGBT Selection Guide

Circuit H 3-Phase Bridge



International
IOR Rectifier

600 Volts

Current Rating (A)	Part Number
5 - 10	CPV362MF
	CPV362MK
	CPV362M4U
	CPV362MM
11-15	CPV363M4U
	CPV363MK
	CPV363MM
16-20	CPV363MF
	CPV364MU
21-25	CPV364MM
	CPV364MK
26-30	CPV364MF

Standard

Discrete

Low VCE(on) IGBTs for Low Frequency (DC ~ 1kHz) Power Applications

TO-220AB

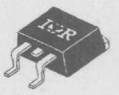
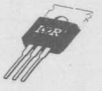
Part Number	V_{CES} Collector-to-Emitter Voltage (V)	Max $V_{CE(on)}$ Collector-to-Emitter Voltage (V)	I_C Continuous Collector Current T_C=25°C (A)	I_C Continuous Collector Current T_C=100°C (A)	P_D Max Power Dissipation (W)	Circuit	Fax-on-Demand	Outline
IRG4BC40S	600	1.6	60	31	160	A	91455	IG1
IRGBC20S	600	3.0	19	10	60	A	90790	
IRGBC30S	600	3.2	34	18	100	A	90688	

Discrete

Low VCE(on) IGBTs for Low Frequency (DC ~ 1kHz) Power Applications

TO-247AC

Part Number	V_{CES} Collector-to-Emitter Voltage (V)	Max $V_{CE(on)}$ Collector-to-Emitter Voltage (V)	I_C Continuous Collector Current T_C=25°C (A)	I_C Continuous Collector Current T_C=100°C (A)	P_D Max Power Dissipation (W)	Circuit	Fax-on-Demand	Outline
IRG4PC40S	600	1.6	60	31	160	A	91465	IG3
IRGPC30S	600	3.2	34	18	100	A	91146	
IRGPC50S	600	2.6	69	41	200	A	90694	

Part Number	V_{CES} Collector-to-Emitter Voltage (V)	Max $V_{CE(on)}$ Collector-to-Emitter Voltage (V)	I_C Continuous Collector Current T_C=25°C (A)	I_C Continuous Collector Current T_C=100°C (A)	P_D Max Power Dissipation (W)	Circuit	Fax-on-Demand	Outline
Fast								
For Medium Frequency (3-10kHz) Power Applications								
Discrete								
							D²Pak	
IRGBC20M-S	600	3.3	13	8	60	B	91131	IG2
IRGBC30M-S	600	3.9	26	16	100	B	91133	
IRGBC40M-S	600	4.0	40	24	160	B	91335	
Discrete								
							TO-220AB	
IRG4BC30F	600	1.6	31	17	100	A	91450	IG1
IRG4BC40F	600	1.5	49	27	160	A	91454	
IRGBC20F	600	3.8	16	9	60	A	90686	
IRGBC20M	600	3.5	13	8	60	A	91127	
IRGBC30M	600	3.9	26	16	100	A	91072	
IRGBC40M	600	4.0	40	24	160	A	91074	
IRGBF20F	900	5.3	9	5.3	60	A	90776	
IRGBF30F	900	4.7	20	11	100	A	90773	

Fast

For Higher Frequency (10 - 100 kHz) Power Applications

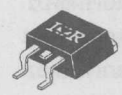
Discrete

TO-247AC

Part Number	V_{CES} Collector-to-Emitter Voltage (V)	Max $V_{CE(on)}$ Collector-to-Emitter Voltage (V)	I_C Continuous Collector Current T_C=25°C (A)	I_C Continuous Collector Current T_C=100°C (A)	P_D Max Power Dissipation (W)	Circuit	Fax-on-Demand	Outline
IRG4PC30F	600	1.6	31	17	100	A	91459	IG3
IRG4PC40F	600	1.5	49	27	160	A	91463	
IRG4PC50F	600	1.5	70	39	200	A	91468	
IRGPC30M	600	3.9	26	16	100	B	91076	
IRGPC40M	600	3.0	40	24	160	B	91078	
IRGPC50M	600	3.2	59	35	200	B	91024	
IRGPC60M	600	3.6	69	51	280	B	91297	
IRGPF20F	900	5.3	9	5.3	60	A	91025	
IRGPF30F	900	4.7	20	11	100	A	91026	
IRGPF40F	900	4.3	31	17	160	A	90770	
IRGPF50F	900	3.7	51	28	200	A	90767	
IRGPH20M	1200	5.6	6.9	4.5	60	A	91137	
IRGPH40F	1200	4.3	29	17	160	A	90764	
IRGPH40M	1200	4.4	31	18	160	A	91029	
IRGPH50F	1200	3.9	45	25	200	A	90761	
IRGPH50M	1200	3.9	42	23	200	A	91030	

Co-Pack

D²Pak



Part Number	V_{CES} Collector-to-Emitter Voltage (V)	Max $V_{CE(on)}$ Collector-to-Emitter Voltage (V)	I_C Continuous Collector Current T_C=25°C (A)	I_C Continuous Collector Current T_C=100°C (A)	P_D Max Power Dissipation (W)	Circuit	Fax-on-Demand	Outline
IRGBC20MD2-S	600	3.5	13	8	60	B	91141	IG2
IRGBC30MD2-S	600	3.9	26	16	100	B	91143	

Fast

For Medium Frequency (3-10kHz) Power Applications

Co-Pack

TO-220AB

Part Number	V_{CES} Collector-to-Emitter Voltage (V)	Max $V_{CE(on)}$ Collector-to-Emitter Voltage (V)	I_C Continuous Collector Current T_C=25°C (A)	I_C Continuous Collector Current T_C=100°C (A)	P_D Max Power Dissipation (W)	Circuit	Fax-on-Demand	Outline
IRG4BC30FD	600	1.6	31	17	100	B	91451	IG1
IRGBC20FD2	600	3.8	16	9	60	B	90788	
IRGBC20MD2	600	3.5	13	8	60	B	91106	
IRGBC30MD2	600	3.9	26	16	100	B	91108	

Co-Pack

TO-247AC

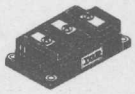
IRG4PC30FD	600	1.6	31	17	100	B	91460	IG3
IRG4PC40FD	600	1.5	49	27	160	B	91464	
IRG4PC50FD	600	1.5	70	39	200	B	91469	
IRGPC20MD2	600	3.5	13	8	60	B	91144	
IRGPC30MD2	600	3.9	26	16	100	B	91082	
IRGPC40MD2	600	4.0	40	24	160	B	91084	
IRGPC50MD2	600	3.0	59	35	200	B	91145	
IRGPH30MD2	1200	4.5	15	9	100	B	91115	
IRGPH40FD2	1200	4.3	29	17	160	B	91117	
IRGPH40MD2	1200	4.4	31	18	160	B	91118	
IRGPH50FD2	1200	3.9	45	25	200	B	91120	
IRGPH50MD2	1200	3.9	42	23	200	B	91047	

Fast

For Medium Frequency (3-10kHz) Power Applications

Module

Double INT-A-Pak



Part Number	V_{CES} Collector-to-Emitter Voltage (V)	Max $V_{CE(on)}$ Collector-to-Emitter Voltage (V)	I_C Continuous Collector Current T_C=25°C (A)	I_C Continuous Collector Current T_C=100°C (A)	P_D Max Power Dissipation (W)	Circuit	Fax-on-Demand	Outline
IRGDDN300M06	600	3.0	399	159	1563	C	91174	IG13
IRGDDN400M06	600	3.0	599	239	1984	C	91175	
IRGDDN600M06	600	3.7	799	319	2604	C	91176	
IRGRDN300M06	600	3.0	399	159	1563	D	91174	
IRGRDN400M06	600	3.0	599	239	1984	D	91175	
IRGRDN600M06	600	3.7	799	319	2604	D	91176	
IRGTDN200M06	600	3.0	299	119	1000	E	91178	IG12
IRGTDN300M06	600	3.0	399	159	1316	E	91179	

Module

IMS-2

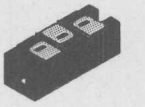
CPV362MF	600	2.8	8.8	4.8	24	H	50026	IG5
CPV362MM	600	4.3	7.9	4.6	24	H	50031	
CPV363MM	600	3.4	13	7	37	H	50033	
CPV364MF	600	2.6	27	15	63	H	50022	
CPV364MM	600	2.7	22	12	62.5	H	50035	

Fast

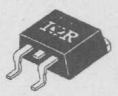
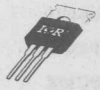
For Medium Frequency (3-10kHz) Power Applications

Module

INT-A-Pak



Part Number	V_{CES} Collector-to-Emitter Voltage (V)	Max $V_{CE(on)}$ Collector-to-Emitter Voltage (V)	I_C Continuous Collector Current T_C=25°C (A)	I_C Continuous Collector Current T_C=100°C (A)	P_D Max Power Dissipation (W)	Circuit	Fax-on-Demand	Outline
IRGKI165F06	600	3.3	164	84	379	F	90967	IG6
IRGKI200F06	600	3.3	199	109	500	F	90968	
IRGKIN050M12	1200	3.7	99	45	455	F	91147	IG7
IRGKIN075M12	1200	3.7	149	64	600	F	91161	
IRGKIN100M06	600	3.0	149	59	500	F	91149	
IRGKIN100M12	1200	3.7	174	74	665	F	91140	
IRGKIN150M06	600	3.0	199	79	658	F	91150	
IRGNI165F06	600	3.3	164	84	379	G	90975	IG8
IRGNI200F06	600	3.3	199	109	500	G	90976	
IRGNIN050M12	1200	3.7	99	45	455	G	91163	IG9
IRGNIN075M12	1200	3.7	149	64	600	G	91164	
IRGNIN100M06	600	3.0	149	59	500	G	91153	
IRGNIN100M12	1200	3.7	174	74	665	G	91165	
IRGNIN150M06	600	3.0	199	79	658	G	91154	
IRGTI165F06	600	3.3	164	84	379	E	90959	IG8
IRGTI200F06	600	3.3	199	109	500	E	90968	
IRGTIN050M12	1200	3.7	99	45	455	E	91167	IG11
IRGTIN075M12	1200	3.7	139	59	600	E	91168	
IRGTIN100M06	600	3.0	149	59	500	E	91157	
IRGTIN100M12	1200	3.7	174	74	665	E	91169	
IRGTIN150M06	600	3.0	199	79	658	E	91158	

Part Number	V_{CES} Collector-to-Emitter Voltage (V)	Max $V_{CE(on)}$ Collector-to-Emitter Voltage (V)	I_C Continuous Collector Current T_C=25°C (A)	I_C Continuous Collector Current T_C=100°C (A)	P_D Max Power Dissipation (W)	Circuit	Fax-on-Demand	Outline
Ultra-Fast							*For Higher Frequency (10 - 100 kHz) Power Applications*	
Discrete								
							D²Pak 	
IRGBC20K-S	600	4.5	10	6	60	A	91130	IG2
IRGBC30K-S	600	4.3	23	14	100	A	91132	
IRGBC40K-S	600	4.2	42	25	160	A	91134	
Discrete								
							TO-220AB 	
IRG4BC20U	600	1.9	13	6.5	60	A	91448	IG1
IRG4BC30U	600	2.1	23	12	100	A	91452	
IRG4BC40U	600	1.7	40	20	160	A	91456	
IRGB420U	500	4.0	14	7.5	60	A	90784	
IRGB430U	500	4.0	25	15	100	A	90783	
IRGB440U	500	4.0	40	22	160	A	90782	
IRGBC20K	600	4.5	10	6	60	A	91128	
IRGBC30K	600	4.8	23	14	100	A	91071	
IRGBC40K	600	4.2	42	25	160	A	91073	

IGBTs

International
IOR Rectifier

Part Number	V_{CES} Collector-to-Emitter Voltage (V)	Max $V_{CE(on)}$ Collector-to-Emitter Voltage (V)	I_C Continuous Collector Current T_C=25°C (A)	I_C Continuous Collector Current T_C=100°C (A)	P_D Max Power Dissipation (W)	Circuit	Fax-on-Demand	Outline
Ultra-Fast								
For Higher Frequency (10 - 100 kHz) Power Applications								
Discrete								
								TO-247AC
IRG4PC20U	600	2.4	13	6.5	60	A	91448	IG3
IRG4PC30U	600	2.1	23	12	100	A	91461	
IRG4PC40U	600	1.7	40	20	160	A	91466	
IRG4PC50U	600	1.7	55	27	200	A	91470	
IRGP430U	500	4.0	25	15	100	A	90780	
IRGP440U	500	4.0	40	22	160	A	90779	
IRGP450U	500	4.2	59	33	200	A	91033	
IRGPC30K	600	4.8	23	14	100	A	91075	
IRGPC40K	600	4.2	42	25	160	A	91077	
IRGPC50K	600	3.7	52	30	200	A	91034	
IRGPC60K	600	4.1	69	41	280	A	91296	
IRGPH40K	1200	4.5	18	10	160	A	91248	
IRGPH50K	1200	4.5	36	20	200	A	91126	
Co-Pack								
								D^2Pak
IRGBC20KD2-S	600	4.5	10	6	60	B	91125	IG2
IRGBC30KD2-S	600	4.8	23	14	100	B	91142	

Ultra-Fast

For Higher Frequency (10 - 100 kHz) Power Applications

Co-Pack

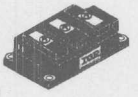
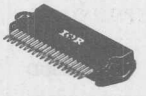
TO-220AB

Part Number	V_{CES} Collector-to-Emitter Voltage (V)	Max $V_{CE(on)}$ Collector-to-Emitter Voltage (V)	I_C Continuous Collector Current T_C=25°C (A)	I_C Continuous Collector Current T_C=100°C (A)	P_D Max Power Dissipation (W)	Circuit	Fax-on-Demand	Outline
IRG4BC20UD	600	1.9	13	6.5	60	A	91449	IG1
IRG4BC30UD	600	2.1	23	12	100	B	91453	
IRGB420UD2	500	3.9	14	7.5	60	B	91066	
IRGB430UD2	500	4.0	25	15	100	B	91067	
IRGBC20KD2	600	4.5	10	6	60	B	91105	
IRGBC30KD2	600	4.8	23	14	100	B	91107	
IRGBC30UD2	600	4.0	23	12	100	B	90796	

Co-Pack

TO-247AC

IRG4PC30UD	600	2.1	23	12	100	B	91462	IG1
IRG4PC40UD	600	1.7	40	20	160	B	91467	IG3
IRG4PC50UD	600	1.7	55	27	200	B	91471	
IRGP430UD2	500	4.0	25	15	100	B	91063	
IRGP440UD2	500	4.0	40	22	160	B	91064	
IRGP450UD2	500	4.2	59	33	200	B	91065	
IRGPC20KD2	600	4.5	10	6	60	B	91109	
IRGPC30KD2	600	4.8	23	14	100	B	91081	
IRGPC40KD2	600	4.2	42	25	160	B	91114	
IRGPC50KD2	600	3.7	52	30	200	B	91123	
IRGPC50UD2	600	4.0	55	27	200	B	90802	
IRGPH40KD2	1200	5.5	18	10	160	B	91250	
IRGPH50KD2	1200	4.5	36	20	200	B	91121	

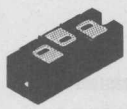
Part Number	V_{CES} Collector-to-Emitter Voltage (V)	Max $V_{CE(on)}$ Collector-to-Emitter Voltage (V)	I_C Continuous Collector Current T_C=25°C (A)	I_C Continuous Collector Current T_C=100°C (A)	P_D Max Power Dissipation (W)	Circuit	Fax-on-Demand	Outline
Ultra-Fast							*For Higher Frequency (10-30kHz) Power Applications*	
Module								
							Double INT-A-Pak 	
IRGDDN300K06	600	3.7	339	139	1563	C	91195	IG13
IRGDDN400K06	600	3.7	519	199	1984	C	91196	
IRGDDN600K06	600	3.7	679	279	2604	C	91197	
IRGRDN300K06	600	3.7	339	139	1563	D	91201	
IRGRDN400K06	600	3.7	519	199	1984	D	91202	
IRGRDN600K06	600	3.7	679	279	2604	D	91197	
IRGTDN150K06	600	3.7	169	69	781	E	91200	IG12
IRGTDN200K06	600	3.7	259	99	1000	E	91198	
IRGTDN300K06	600	3.7	339	139	1316	E	91199	
Module								
							IMS-2 	
CPV362M4U	600	2.2	7.2	3.9	23	H	50044	IG5
CPV362MK	600	4.5	5.7	3	24	H	50032	
CPV363M4U	600	2.2	13	6.8	36	H	50039	
CPV363MK	600	4.0	11	6	37	H	50034	
CPV364MK	600	4.1	24	13	63	H	50037	
CPV364MU	600	3.6	20	10	63	H	50025	

Ultra-Fast

For Higher Frequency (10-30kHz) Power Applications

Module

INT-A-Pak



Part Number	V_{CES} Collector-to-Emitter Voltage (V)	Max $V_{CE(on)}$ Collector-to-Emitter Voltage (V)	I_C Continuous Collector Current T_C=25°C (A)	I_C Continuous Collector Current T_C=100°C (A)	P_D Max Power Dissipation (W)	Circuit	Fax-on-Demand	Outline
IRGKI115U06	600	3.8	129	69	379	F	90963	IG6
IRGKI140U06	600	3.7	169	94	500	F	90964	
IRGKIN100K06	600	3.7	129	50	500	F	91186	IG7
IRGKIN150K06	600	3.7	169	69	658	F	91186	
IRGNI115U06	600	3.8	129	69	379	G	90971	IG8
IRGNI140U06	600	3.7	169	94	500	G	90972	
IRGNIN100K06	600	3.7	129	50	500	G	91189	IG9
IRGNIN150K06	600	3.7	169	69	658	G	91190	
IRGTI115U06	600	3.8	129	69	379	E	90955	IG10
IRGTI140U06	600	3.7	169	94	500	E	90956	
IRGTIN100K06	600	3.7	129	50	500	E	91193	IG11
IRGTIN150K06	600	3.7	169	69	658	E	91194	

SCR Inverters

International
IOR Rectifier

Part Number	V_{RRM} V_{DRM} (V)	IT(RMS) (A)	$I_{T(AV)}$ (A)	@T_C (°C)	VGT (V)	I_{TSM} 50 Hz (A)	I_{TSM} 60 Hz (A)	IGT (mA)	VTM @ ITM (V)	VTM @ ITM (A)	tq (µs)	$R_{\Theta JC}$ (DC) (°C/W)	Notes	Fax-on-Demand	Outline
TO-209AC (TO-94) 															
ST083S10PF..0	1000	135	85	85	3	2060	2160	200	2.15	300	18 and 20	0.195	*2 3 4 13 15 16*	25185	T7
ST083S12PF..0	1200	135	85	85	3	2060	2160	200	2.15	300	18 and 20	0.195	*2 3 4 13 15 16*	25185	
ST083S04PF..0	400	135	85	85	3	2060	2160	200	2.15	300	10 and 12	0.195	*2 3 4 13 15 16*	25185	
ST083S08PF..0	800	135	85	85	3	2060	2160	200	2.15	300	10 and 12	0.195	*2 3 4 13 15 16*	25185	
ST103S04PF..0	400	165	105	85	3	2530	2650	200	1.73	300	10 and 15	0.195	*2 3 4 13 15 16*	25183	
ST103S08PF..0	800	165	105	85	3	2530	2650	200	1.73	300	10 and 15	0.195	*2 3 4 13 15 16*	25183	
TO-209AB (TO-93) 															
ST173S10PF..0	1000	275	175	85	3	3940	4120	200	2.07	600	18 and 20	0.105	*2 3 4 13 15 16*	25181	T10
ST173S12PF..0	1200	275	175	85	3	3940	4120	200	2.07	600	18 and 20	0.105	*2 3 4 13 15 16*	25181	
ST183S04PF..0	400	306	195	85	3	4120	4310	200	1.8	600	10 and 15	0.105	*2 3 4 13 15 16*	25179	
ST183S08PF..0	800	306	195	85	3	4120	4310	200	1.8	600	10 and 15	0.105	*2 3 4 13 15 16*	25179	
ST203S10PF..0	1000	320	205	85	3	4420	4630	200	1.72	600	25	0.105	*2 3 4 13 15 16*	25177	
ST203S12PF..0	1200	320	205	85	3	4420	4630	200	1.72	600	25	0.105	*2 3 4 13 15 16*	25177	
ST223S04PF..0	400	345	220	85	3	4920	5150	200	1.58	600	10 and 15	0.105	*2 3 4 13 15 16*	25175	
ST223S08PF..0	800	345	220	85	3	4920	5150	200	1.58	600	10 and 15	0.105	*2 3 4 13 15 16*	25175	

tq (µs)	Code
10	N
12	M
15	L
18	P
20	K
25	J

NOTES:

2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C
3 For Vgt: Tj = 25°C
4 Vtm measured at Tj = Tj max
10 DC operation, double side cooled
11 Value given for RthJC is per module.
12 RMS isolation voltage = 3000V - 50Hz
13 Re-applied dv/dt = 200V/µs. Refer to table below for tq code.
14 Available with spacers and longer terminal screws. Refer to case outline for details.
15 Available with flag terminal. To order, change last '0' to '2' in part number, e.g. ST180S04P2V
16 Available with fast-on terminals. To order, change last 0 to 1 in part number, e.g. ST08304PF..1
17 Re-applied dv/dt = 400V/µs. Refer to table below for tq code

SCR Inverters

International
IOR Rectifier

Part Number	V_{RRM} V_{DRM} (V)	IT(RMS) (A)	$I_{T(AV)}$ (A)	@T_C (°C)	VGT (V)	I_{TSM} 50 Hz (A)	60 Hz (A)	IGT (mA)	VTM @ ITM (V)	(A)	tq (µs)	$R_{\Theta JC}$ (DC) (°C/W)	Notes	Fax-on-Demand	Outline
TO-209AE (TO-118) 															
ST303S10PF..0	1000	471	300	65	3	6690	7000	200	2.16	1255	20 and 25	0.1	*2 3 4 13 16*	25173	T11
ST303S12PF..0	1200	471	300	65	3	6690	7000	200	2.16	1255	20 and 25	0.1	*2 3 4 13 16*	25173	
ST303S04PF..0	400	471	300	65	3	6690	7000	200	2.16	1255	10 and 15	0.1	*2 3 4 13 16*	25173	
ST303S08PF..0	800	471	300	65	3	6690	7000	200	2.16	1255	10 and 15	0.1	*2 3 4 13 16*	25173	
ST333S04PF..0	400	518	330	75	3	9520	9700	200	1.51	1040	12 and 15	0.1	*2 3 4 13 16*	25171	
ST333S08PF..0	800	518	330	75	3	9520	9700	200	1.51	1040	12 and 15	0.1	*2 3 4 13 16*	25171	
TO-200AA (A-Puk) 															
ST173C10CF..0	1000	610	330	55	3	3940	4120	200	2.07	600	18 and 20	0.08	*2 3 4 10 13 16*	25180	T12
ST173C12CF..0	1200	610	330	55	3	3940	4120	200	2.07	600	18 and 20	0.08	*2 3 4 10 13 16*	25180	
ST183C04CF..0	400	690	370	55	3	4120	4310	200	1.8	600	10 and 15	0.08	*2 3 4 10 13 16*	25178	
ST183C08CF..0	800	690	370	55	3	4120	4310	200	1.8	600	10 and 15	0.08	*2 3 4 10 13 16*	25178	
ST203C10CF..0	1000	700	370	55	3	4420	4630	200	1.72	600	25	0.08	*2 3 4 10 13 16*	25176	
ST203C12CF..0	1200	700	370	55	3	4420	4630	200	1.72	600	25	0.08	*2 3 4 10 13 16*	25176	
ST223C04CF..0	400	745	390	55	3	4920	5150	200	1.58	600	10 and 15	0.08	*2 3 4 10 13 16*	25174	
ST223C08CF..0	800	745	390	55	3	4920	5150	200	1.58	600	10 and 15	0.08	*2 3 4 10 13 16*	25174	

tq (µs)	Code
10	N
12	M
15	L
18	P
20	K
25	J

NOTES:

2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C
3 For Vgt: Tj = 25°C
4 Vtm measured at Tj = Tj max
10 DC operation, double side cooled
11 Value given for RthJC is per module.
12 RMS isolation voltage = 3000V - 50Hz
13 Re-applied dv/dt = 200V/µs. Refer to table below for tq code.
14 Available with spacers and longer terminal screws. Refer to case outline for details.
15 Available with flag terminal. To order, change last '0' to '2' in part number, e.g. ST180S04P2V
16 Available with fast-on terminals. To order, change last 0 to 1 in part number, e.g. ST08304PF..1
17 Re-applied dv/dt = 400V/µs. Refer to table below for tq code

SCR Inverters

International IOR Rectifier

Part Number	V_{RRM} V_{DRM} (V)	IT(RMS) (A)	$I_{T(AV)}$ (A)	@T_{HS} (°C)	VGT (V)	I_{TSM} 50 Hz (A)	60 Hz (A)	IGT (mA)	VTM @ ITM (V)	(A)	tq (µs)	$R_{\Theta J\text{-}HS}$ (°C/W)	Notes	Fax-on-Demand	Outline
TO-200AB (E-Puk) 															
ST303C10CF..0	1000	1180	620	55	3	6690	7000	200	2.16	1255	20 and 25	0.04	*2 3 4 10 13 16*	25172	T13
ST303C12CF..0	1200	1180	620	55	3	6690	7000	200	2.16	1255	20 and 25	0.04	*2 3 4 10 13 16*	25172	
ST303C04CF..0	400	1180	620	55	3	6690	7000	200	2.16	1255	10 and 15	0.04	*2 3 4 10 13 16*	25172	
ST303C08CF..0	800	1180	620	55	3	6690	7000	200	2.16	1255	10 and 15	0.04	*2 3 4 10 13 16*	25172	
ST333C04CF..0	400	1435	720	55	3	9250	9700	200	1.96	1810	12 and 15	0.04	*2 3 4 10 13 16*	25170	
ST333C08CF..0	800	1435	720	55	3	9250	9700	200	1.96	1810	12 and 15	0.04	*2 3 4 10 13 16*	25170	
TO-200AC (B-Puk) 															
ST303C10LF..0	1000	995	515	55	3	6690	7000	200	2.16	1255	20 and 25	0.05	*2 3 4 10 13 16*		T14
ST303C12LF..0	1200	995	515	55	3	6690	7000	200	2.16	1255	20 and 25	0.05	*2 3 4 10 13 16*		
ST303C04LF..0	400	995	515	55	3	6690	7000	200	2.16	1255	10 and 15	0.05	*2 3 4 10 13 16*		
ST303C08LF..0	800	995	515	55	3	6690	7000	200	2.16	1255	10 and 15	0.05	*2 3 4 10 13 16*		
ST333C04LF..0	400	1230	620	55	3	9250	9700	200	1.96	1810	12 and 15	0.05	*2 3 4 10 13 16*		
ST333C08LF..0	800	1230	620	55	3	9250	9700	200	1.96	1810	12 and 15	0.05	*2 3 4 10 13 16*		
ST733C04LF..0	400	1900	940	55	3	16800	17600	200	1.63	1700	12 and 15	0.031	*2 3 4 10 13 16*		
ST733C08LF..0	800	1900	940	55	3	16800	17600	200	1.63	1700	12 and 15	0.031	*2 3 4 10 13 16*		

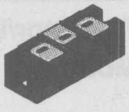
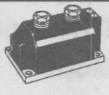
tq (µs)	Code
10	N
12	M
15	L
18	P
20	K
25	J

NOTES:

2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C
3 For Vgt: Tj = 25°C
4 Vtm measured at Tj = Tj max
10 DC operation, double side cooled
11 Value given for RthJC is per module.
12 RMS isolation voltage = 3000V - 50Hz
13 Re-applied dv/dt = 200V/µs. Refer to table below for tq code.
14 Available with spacers and longer terminal screws. Refer to case outline for details.
15 Available with flag terminal. To order, change last '0' to '2' in part number, e.g. ST180S04P2V
16 Available with fast-on terminals. To order, change last 0 to 1 in part number, e.g. ST08304PF..1
17 Re-applied dv/dt = 400V/µs. Refer to table below for tq code

SCR Inverters

International
IOR Rectifier

Part Number Doubler Circuit Positive Control	Part Number Doubler Circuit Negative Control	V_{RRM} V_{DRM} (V)	$I_{T(RMS)}$ (A)	$I_{T(AV)}$ (A)	@T_C (°C)	I_{TSM} 50 Hz (A)	I_{TSM} 60 Hz (A)	tq (µs)	$R_{\Theta JC}$ (DC) (°C/W)	Notes	Fax-on-Demand	Outline
Thyristor/Thyristor, Fast Module										INT-A-Pak 		
IRKTF72-12H..		1200	71	71	90	1750	1830	20 and 25	0.125	2 11 12 14 17	87104	M5
IRKTF72-06H..		600	71	71	90	1750	1830	20 and 25	0.125	2 11 12 14 17	87104	
IRKTF72-08H..		800	71	71	90	1750	1830	20 and 25	0.125	2 11 12 14 17	87104	
IRKTF82-04H..		400	81	81	90	1850	1950	10 and 15	0.125	2 11 12 14 17	87103	
IRKTF82-08H..		800	81	81	90	1850	1950	10 and 15	0.125	2 11 12 14 17	87103	
IRKTF102-12H..		1200	105	105	90	2400	2500	20 and 25	0.085	2 11 12 14 17	87097	
IRKTF102-06H..		600	105	105	90	2400	2500	20 and 25	0.085	2 11 12 14 17	87097	
IRKTF102-08H..		800	105	105	90	2400	2500	20 and 25	0.085	2 11 12 14 17	87097	
IRKTF112-04H..		400	112	112	90	2600	2720	10 and 15	0.085	2 11 12 14 17	87091	
IRKTF112-08H..		800	112	112	90	2600	2720	10 and 15	0.085	2 11 12 14 17	87091	
IRKTF132-04H..		400	130	130	90	2700	2825	15	0.085	2 11 12 14 17	87092	
IRKTF132-08H..		800	130	130	90	2700	2825	15	0.085	2 11 12 14 17	87092	
IRKTF152-04F..		400	150	150	90	3700	3870	15	0.085	2 11 12 13 14	87093	
IRKTF152-08F..		800	150	150	90	3700	3870	15	0.085	2 11 12 13 14	87093	
Thyristor/Thyristor, Fast Module										MAGN-A-Pak 		
IRKTF180-12H..		1200	180	180	85	6000	6280	20 and 25	0.063	2 11 12 17	87100	M6
IRKTF180-04H..		400	180	180	85	6000	6280	20 and 25	0.063	2 11 12 17	87100	
IRKTF180-08H..		800	180	180	85	6000	6280	20 and 25	0.063	2 11 12 17	87100	
IRKTF200-12H..		1200	200	200	85	6400	6700	20 and 25	0.063	2 11 12 13	87099	
IRKTF200-04H..		400	200	200	85	6400	6700	20 and 25	0.063	2 11 12 13	87099	
IRKTF200-08H..		800	200	200	85	6400	6700	20 and 25	0.063	2 11 12 13	87099	

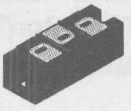
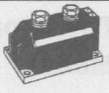
tq (µs)	Code
10	N
12	M
15	L
18	P
20	K
25	J

NOTES:

2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C
3 For Vgt: Tj = 25°C
4 Vtm measured at Tj = Tj max
10 DC operation, double side cooled
11 Value given for RthJC is per module.
12 RMS isolation voltage = 3000V - 50Hz
13 Re-applied dv/dt = 200V/µs. Refer to table below for tq code.
14 Available with spacers and longer terminal screws. Refer to case outline for details.
15 Available with flag terminal. To order, change last '0' to '2' in part number, e.g. ST180S04P2V
16 Available with fast-on terminals. To order, change last 0 to 1 in part number, e.g. ST08304PF..1
17 Re-applied dv/dt = 400V/µs. Refer to table below for tq code

SCR Inverters

International IOR Rectifier

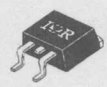
Part Number Doubler Circuit Positive Control	Part Number Doubler Circuit Negative Control	V_{RRM} V_{DRM} (V)	$I_{T(RMS)}$ (A)	$I_{T(AV)}$ (A)	@T_C (°C)	I_{TSM} 50 Hz (A)	I_{TSM} 60 Hz (A)	tq (µs)	$R_{\Theta JC}$ (DC) (°C/W)	Notes	Fax-on-Demand	Outline
Thyristor/Diode, Fast Module										INT-A-Pak 		
IRKHF72-12H..	IRKLF72-12H..	1200	71	71	90	1750	1830	20 and 25	0.125	*2 14 17*	87104	M5
IRKHF72-06H..	IRKLF72-06H..	600	71	71	90	1750	1830	20 and 25	0.125	*2 14 17*	87104	
IRKHF72-08H..	IRKLF72-08H..	800	71	71	90	1750	1830	20 and 25	0.125	*2 14 17*	87104	
IRKHF82-04H..	IRKLF82-04H..	400	81	81	90	1850	1950	10 and 15	0.125	*2 14 17*	87103	
IRKHF82-08H..	IRKLF82-08H..	800	81	81	90	1850	1950	10 and 15	0.125	*2 14 17*	87103	
IRKHF102-12H..	IRKLF102-12H..	1200	105	105	90	2400	2500	20 and 25	0.085	*2 14 17*	87097	
IRKHF102-06H..	IRKLF102-06H..	600	105	105	90	2400	2500	20 and 25	0.085	*2 14 17*	87097	
IRKHF102-08H..	IRKLF102-08H..	800	105	105	90	2400	2500	20 and 25	0.085	*2 14 17*	87097	
IRKHF112-04H..	IRKLF112-04H..	400	112	112	90	2600	2720	10 and 15	0.085	*2 14 17*	87091	
IRKHF112-08H..	IRKLF112-08H..	800	112	112	90	2600	2720	10 and 15	0.085	*2 14 17*	87091	
IRKHF132-04H..	IRKLF132-04H..	400	130	130	90	2700	2825	15	0.085	*2 14 17*	87092	
IRKHF132-08H..	IRKLF132-08H..	800	130	130	90	2700	2825	15	0.085	*2 14 17*	87092	
IRKHF152-04H..	IRKLF152-04H..	400	150	150	90	3700	3870	15	0.085	*2 13 14*	87093	
IRKHF152-08H..	IRKLF152-08H..	800	150	150	90	3700	3870	15	0.085	*2 13 14*	87093	
Thyristor/Diode, Fast Module										MAGN-A-Pak 		
IRKHF180-12H..	IRKLF180-12H..	1200	180	180	85	6000	6280	20 and 25	0.063	*2 11 12 17*	87100	M6
IRKHF180-04H..	IRKLF180-04H..	400	180	180	85	6000	6280	20 and 25	0.063	*2 11 12 17*	87100	
IRKHF180-08H..	IRKLF180-08H..	800	180	180	85	6000	6280	20 and 25	0.063	*2 11 12 17*	87100	
IRKHF200-12H..	IRKLF200-12H..	1200	200	200	85	6400	6700	20 and 25	0.063	*2 11 12 17*	87099	
IRKHF200-04H..	IRKLF200-04H..	400	200	200	85	6400	6700	20 and 25	0.063	*2 11 12 17*	87099	
IRKHF200-08H..	IRKLF200-08H..	800	200	200	85	6400	6700	20 and 25	0.063	*2 11 12 17*	87099	

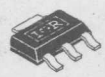
tq (µs)	Code
10	N
12	M
15	L
18	P
20	K
25	J

NOTES:

2 For Itsm: 100% VRRM reapplied, Tj=Tj max.=125°C
3 For Vgt: Tj = 25°C
4 Vtm measured at Tj = Tj max
10 DC operation, double side cooled
11 Value given for RthJC is per module.
12 RMS isolation voltage = 3000V - 50Hz
13 Re-applied dv/dt = 200V/µs. Refer to table below for tq code.
14 Available with spacers and longer terminal screws. Refer to case outline for details.
15 Available with flag terminal. To order, change last '0' to '2' in part number, e.g. ST180S04P2V
16 Available with fast-on terminals. To order, change last 0 to 1 in part number, e.g. ST08304PF..1
17 Re-applied dv/dt = 400V/µs. Refer to table below for tq code

Fully Protected Power MOSFET

Part Number	$V_{DS(clamp)}$ Continuous Drain-to-Source Voltage (V)	$R_{DS(on)}$ On-State Resistance (Ω)	I_D Continuous Drain Current 25°C (A)	Unclamped Single Pulse Inductive Energy (mJ)	P_D Max. Power Dissipation (W)	Fax-on-Demand	 TO-220AB H12	 D^2Pak H6
IRSF3010	50	80	11	400	40	60027		

Part Number	$V_{DS(clamp)}$ Continuous Drain-to-Source Voltage (V)	$R_{DS(on)}$ On-State Resistance (Ω)	I_D Continuous Drain Current 25°C (A)	Unclamped Single Pulse Inductive Energy (mJ)	P_D Max. Power Dissipation (W)	Fax-on-Demand	 TO-220AB H12	 SOT-223 H4
IRSF3011	50	200	5	200	30	60039		
IRSF3021	50	200	3.0	200	30	60068		
IRSF3031	50	200	1.8	200	30	60069		

Schottky Diodes

International
IOR Rectifier

Surface Mount

Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A)	(T_C) (C)	V_{FM} @ I_{FM} 25°C (V)	E_{AS} (mJ)	I_{AR} (A)	I_{RM} @ V_{RWM} 25°C (mA)	Max. T_J (°C)	Notes	Fax-on-Demand	Outline
SMB											
10BQ015	15	1	78	0.34	5	0.2	12	100	2 5 10 14	20396	J2
10BQ040	40	1	112	0.53	18	0.2	4	150	2 5 8 14	20397	
10BQ060	60	1	103	0.57	11	1	5	150	2 5 8 14	20438	
10BQ100	100	1	152	0.78	9.7	1	1	175	2 5 8 14	20437	
SMC											
30BQ015	15	3	75	0.35	10	0.6	50	100	2 5 9 14	20490	J3
30BQ040	40	3	123	0.45	35	0.6	20	150	2 5 11 14	20439	
30BQ060	60	3	122	0.52	35	3.4	20	150	2 5 11 14	20440	
30BQ100	100	3	148	0.62	50	2.8	5	175	2 5 11 14	20441	
D²Pak											
6TQ035S	35	6	163	0.51	8	1.2	7	175	2 7 5 14	20283	K3
6TQ045S	45	6	163	0.51	8	1.2	7	175	2 7 5 14	20283	
8TQ080S	80	8	157	0.58	7.5	0.5	7	175	2 7 5 14	20238	
8TQ100S	100	8	157	0.58	7.5	0.5	7	175	2 7 5 14	20238	
10TQ035S	35	10	151	0.49	13	2	15	175	2 5 7 14	20057	
10TQ045S	45	10	151	0.49	13	2	15	175	2 5 7 14	20057	
12TQ035S	35	15	120	0.5	16	2.4	70	150	2 5 7 14	20239	
12TQ045S	45	15	120	0.5	16	2.4	70	150	2 5 7 14	20239	
18TQ035S	45	18	149	0.53	24	3.6	25	175	2 5 7 14	20178	
18TQ045S	45	18	149	0.53	24	3.6	25	175	2 5 7 14	20178	
19TQ015S	15	19	80	0.32	6.75	1.5	522	100	2 5 9 14	20266	
20TQ035S	35	20	116	0.51	27	4	105	150	2 5 7 14	20241	
20TQ045S	45	20	116	0.51	27	4	105	150	2 5 7 14	20241	

2 For EAS: Tj = 25°C, IAS=IAR
5 Available on tape and reel. Refer to case outline.
6 Available with optional leadforms. Refer to case outline.
7 For VFM and IFM: TJ = 125°C unless otherwise noted.
8 For VFM: TJ = 25°C; for IRM TJ=125°C
9 For VFM: TJ = 75°C; for IRM TJ=100°C
10 For VFM: TJ = 25°C; for IRM TJ=100°C
11 For VFM: TJ = 125°C; for IRM TJ=125°C
12 Current decaying linearly to 0 in 2 µs. Frequency limited by TJ max. VA=1.5 X VR typical
13 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=3 X VR typical
14 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=1.5 X VR typical
15 VFM rated at 160A
16 For VFM: TJ=70°C; for IRM TJ = 125°C
17 For VFM: TJ=175°C; for IRM TJ = 125°C

Schottky Diodes

International
IOR Rectifier

Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A)	(C)	V_{FM} @ I_{FM} 25°C (V)	E_{AS} (mJ)	I_{AR} (A)	I_{RM} @ V_{RWM} 25°C (mA)	Max. T_J (°C)	Notes	Fax-on-Demand	Outline
DO-204AL											
11DQ03	30	1.1	58	0.5			6	125	2 7 14	20287	J5
11DQ04	40	1.1	58	0.5			6	125	2 5 7 14	20287	
11DQ05	50	1.1	40	0.53			11	125	2 7 14	20288	
11DQ06	60	1.1	40	0.53			11	125	2 7 14	20288	
11DQ09	90	1.1	48	0.68			1	125	2 7 14	20289	
11DQ10	100	1.1	48	0.68			1	125	2 7 14	20289	
DO-201AD											
31DQ03	30	3.3	35	0.51			25	125	2 5 7 14	20304	J6
31DQ04	40	3.3	35	0.51			25	125	2 5 7 14	20304	
31DQ05	50	3.3	19	0.53			30	125	2 5 7 14	20305	
31DQ06	60	3.3	19	0.53			30	125	2 5 7 14	20305	
31DQ09	90	3.3	25	0.69			4	125	2 5 7 14	20306	
31DQ10	100	3.3	25	0.69			4	125	2 5 7 14	20306	
DO-204AR											
50SQ080	80	5	119	0.52	15	1	7	175	2 7 14	20060	J7
50SQ100	100	5	119	0.52	15	1	7	175	2 7 14	20060	
80SQ035	35	8	119	0.44	10	1.6	15	175	2 7 14	20047	
80SQ040	40	8	119	0.44	10	1.6	15	175	2 7 14	20047	
80SQ045	45	8	119	0.44	10	1.6	15	175	2 7 14	20047	
90SQ035	35	9	69	0.42	12	1.8	70	150	2 7 14	20222	
90SQ040	40	9	69	0.42	12	1.8	70	150	2 7 14	20222	
90SQ045	45	9	69	0.42	12	1.8	70	150	2 7 14	20222	
95SQ015	15	9	55	0.25	4.5	1	348	100	2 5 9 14	20273	

2 For EAS: Tj = 25°C, IAS=IAR
5 Available on tape and reel. Refer to case outline.
6 Available with optional leadforms. Refer to case outline.
7 For VFM and IFM: TJ = 125°C unless otherwise noted.
8 For VFM: TJ = 25°C; for IRM TJ=125°C
9 For VFM: TJ = 75°C; for IRM TJ=100°C
10 For VFM: TJ = 25°C; for IRM TJ=100°C
11 For VFM: TJ = 125°C; for IRM TJ=125°C
12 Current decaying linearly to 0 in 2 µs. Frequency limited by TJ max. VA=1.5 X VR typical
13 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=3 X VR typical
14 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=1.5 X VR typical
15 VFM rated at 160A
16 For VFM: TJ=70°C; for IRM TJ = 125°C
17 For VFM: TJ=175°C; for IRM TJ = 125°C

Schottky Diodes

International
IOR Rectifier

Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A)	(C)	V_{FM} @ I_{FM} 25°C (V)	E_{AS} (mJ)	I_{AR} (A)	I_{RM} @ V_{RWM} 25°C (mA)	Max. T_J (°C)	Notes	Fax-on-Demand	Outline
										TO-220AC	
6TQ035	35	6	163	0.51	8	1.2	7	175	2 7 14	20283	J11
6TQ040	40	6	163	0.51	8	1.2	7	175	2 7 14	20283	
6TQ045	45	6	163	0.51	8	1.2	7	175	2 7 14	20283	
8TQ080	80	8	157	0.58	7.5	0.5	7	175	2 7 14	20238	
8TQ100	100	8	157	0.58	7.5	0.5	7	175	2 7 14	20238	
10TQ035	35	10	151	0.49	13	2	15	175	2 7 14	20057	
10TQ040	40	10	151	0.49	13	2	15	175	2 7 14	20057	
10TQ045	45	10	151	0.49	13	2	15	175	2 7 14	20057	
12TQ035	35	15	120	0.5	16	2.4	70	150	2 7 14	20239	
12TQ040	40	15	120	0.5	16	2.4	70	150	2 7 14	20239	
12TQ045	45	15	120	0.5	16	2.4	70	150	2 7 14	20239	
18TQ035	35	18	149	0.53	24	3.6	25	175	2 7 14	20178	
18TQ040	40	18	149	0.53	24	3.6	25	175	2 7 14	20178	
18TQ045	45	18	149	0.53	24	3.6	25	175	2 7 14	20178	
19TQ015	15	19	80	0.32	6.75	1.5	522	100	2 5 9 14	20266	
20TQ035	35	20	116	0.51	27	4	105	150	2 7 14	20241	
20TQ040	40	20	116	0.51	27	4	105	150	2 7 14	20241	
20TQ045	45	20	116	0.51	27	4	105	150	2 7 14	20241	
MBR1035	35	10	120	0.57		1	15	150	2 7 12	20317	
MBR1045	45	10	120	0.57		1	15	150	2 7 12	20317	
MBR1635	35	16	125	0.57		1	40	150	2 7 12	20319	
MBR1645	45	16	125	0.57		1	40	150	2 7 12	20319	
MBR735	35	7.5	120	0.57		1	15	150	2 7 12	20325	
MBR745	45	7.5	120	0.57		1	15	150	2 7 12	20325	

2 For EAS: Tj = 25°C, IAS=IAR
5 Available on tape and reel. Refer to case outline.
6 Available with optional leadforms. Refer to case outline.
7 For VFM and IFM: TJ = 125°C unless otherwise noted.
8 For VFM: TJ = 25°C; for IRM TJ=125°C
9 For VFM: TJ = 75°C; for IRM TJ=100°C
10 For VFM: TJ = 25°C; for IRM TJ=100°C
11 For VFM: TJ = 125°C; for IRM TJ=125°C
12 Current decaying linearly to 0 in 2 µs. Frequency limited by TJ max. VA=1.5 X VR typical
13 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=3 X VR typical
14 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=1.5 X VR typical
15 VFM rated at 160A
16 For VFM: TJ=70°C; for IRM TJ = 125°C
17 For VFM: TJ=175°C; for IRM TJ = 125°C

Schottky Diodes

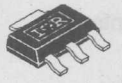
International
IOR Rectifier

Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A)	(T_C) (C)	V_{FM} @ I_{FM} 25°C (V)	E_{AS} (mJ)	I_{AR} (A)	I_{RM} @ V_{RWM} 25°C (mA)	Max. T_J (°C)	Notes	Fax-on-Demand	Outline
DO-203AB (DO-5) 											
1N6097	30	50	70	0.86	81	12	250	125	2 14 15 16	20329	J16
1N6098	40	50	70	0.86	81	12	250	125	2 14 15 16	20329	
60HQ100	100	60	118	0.7	15	1	20	175	2 7 14	20055	
55HQ030	30	60	110	0.41	54	12	280	150	2 7 14	20268	
51HQ035	35	60	96	0.58	81	12	200	150	2 7 14	20021	
SD51	35	60	90	0.66			200	150	2 8 14	20327	
50HQ035	35	60	101	0.53	81	12	200	150	2 7 14	20032	
51HQ040	40	60	96	0.58	81	12	200	150	2 7 14	20021	
50HQ040	40	60	101	0.53	81	12	200	150	2 7 14	20032	
51HQ045	45	60	96	0.58	81	12	200	150	2 7 14	20021	
1N6392	45	60	115	0.68	101	15	60	175	2 8 14	20080	
50HQ045	45	60	101	0.53	81	12	200	150	2 7 14	20032	
60HQ080	80	60	118	0.7	15	1	20	175	2 7 14	20055	
75HQ035	35	75	117	0.63	101	15	45	175	2 7 14	20246	
MBR7535	35	75	90	0.6			150	150	2 7 14	20325	
75HQ040	40	75	117	0.63	101	15	45	175	2 7 14	20246	
75HQ045	45	75	117	0.63	101	15	45	175	2 7 14	20246	
MBR7545	45	75	90	0.6			150	150	2 7 14	20325	
85HQ035	35	85	112	0.62	114	17	45	175	2 7 14	20247	
85HQ040	40	85	112	0.62	114	17	45	175	2 7 14	20247	
85HQ045	45	85	112	0.62	114	17	45	175	2 7 14	20247	
95HQ015	15	95	44	0.39	9	2	1000	100	2 7 14	20272	

2 For EAS: T_j = 25°C, IAS=IAR
5 Available on tape and reel. Refer to case outline.
6 Available with optional leadforms. Refer to case outline.
7 For VFM and IFM: TJ = 125°C unless otherwise noted.
8 For VFM: TJ = 25°C; for IRM TJ=125°C
9 For VFM: TJ = 75°C; for IRM TJ=100°C
10 For VFM: TJ = 25°C; for IRM TJ=100°C
11 For VFM: TJ = 125°C; for IRM TJ=125°C
12 Current decaying linearly to 0 in 2 µs. Frequency limited by TJ max. VA=1.5 X VR typical
13 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=3 X VR typical
14 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=1.5 X VR typical
15 VFM rated at 160A
16 For VFM: TJ=70°C; for IRM TJ = 125°C
17 For VFM: TJ=175°C; for IRM TJ = 125°C

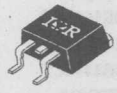
Surface Mount

Center Tap — SOT-223



Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A)	(C)	V_{FM} @ I_{FM} 25°C (V)	E_{AS} (mJ)	I_{AR} (A)	I_{RM} @ V_{RWM} 25°C (mA)	Max. T_J (°C)	Notes	Fax-on-Demand	Outline
20CJQ100	100	2	152	0.76	13	1	0.73	175	2 7 14	20480	K1
20CJQ030	30	2	132	0.52	17	0.2	13	150	2 7 14	20477	
20CJQ045	45	2	126	0.6	15	0.2	5.6	150	2 7 14	20478	
20CJQ060	60	2	127	0.67	10	0.1	2.4	150	2 7 14	20479	

Center Tap — D²Pak

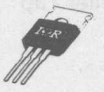


Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A)	(C)	V_{FM} @ I_{FM} 25°C (V)	E_{AS} (mJ)	I_{AR} (A)	I_{RM} @ V_{RWM} 25°C (mA)	Max. T_J (°C)	Notes	Fax-on-Demand	Outline
MBRB20100CT	100	10	133	0.7		0.5	150	150	2 5 12	20321	K3
10CTQ150S	150	10	145	0.86	6.75	0.3	7	175	2 5 7 14	20198	
MBRB2080CT	80	10	133	0.7		0.5	150	150	2 5 12	20321	
MBRB2090CT	90	10	133	0.7		0.5	150	150	2 5 12	20321	
12CTQ035S	35	12	157	0.63	8	1.2	7	175	2 5 7 14	20054	
12CTQ045S	45	12	157	0.63	8	1.2	7	175	2 5 7 14	20054	
15CTQ035S	35	15	123	0.65	10	1.5	32	150	2 5 7 14	20240	
MBRB1535CT	35	15	105	0.72		1	15	150	2 5 12	20318	
MBRB1545CT	45	15	105	0.72		1	15	150	2 5 12	20318	
15CTQ045S	45	15	123	0.65	10	1.5	32	150	2 5 7 14	20240	
16CTQ100S	100	16	145	0.69	7.5	0.5	7	175	2 5 7 14	20192	
16CTQ080S	80	16	145	0.69	7.5	0.5	7	175	2 5 7 14	20192	
20CTQ035S	35	20	145	0.68	13	2	15	175	2 5 7 14	20056	
20CTQ045S	45	20	145	0.68	13	2	15	175	2 5 7 14	20056	
32CTQ030S	30	30	109	0.53	13	3	97	150	2 5 7 14	20267	
25CTQ035S	35	30	102	0.64	20	3	70	150	2 5 7 14	20242	
30CTQ035S	35	30	127	0.7	20	3	15	175	2 5 7 14	20332	
30CTQ045S	45	30	127	0.7	20	3	15	175	2 5 7 14	20332	
25CTQ045S	45	30	102	0.64	20	3	70	150	2 5 7 14	20242	
30CTQ050S	50	30	97	0.71	13	1.5	45	150	2 5 7 14	20332	
30CTQ060S	60	30	97	0.71	13	1.5	45	150	2 5 7 14	20332	

2 For EAS: Tj = 25°C, IAS=IAR
5 Available on tape and reel. Refer to case outline.
6 Available with optional leadforms. Refer to case outline.
7 For VFM and IFM: TJ = 125°C unless otherwise noted.
8 For VFM: TJ = 25°C; for IRM TJ=125°C
9 For VFM: TJ = 75°C; for IRM TJ=100°C
10 For VFM: TJ = 25°C; for IRM TJ=100°C
11 For VFM: TJ = 125°C; for IRM TJ=125°C
12 Current decaying linearly to 0 in 2 µs. Frequency limited by TJ max. VA=1.5 X VR typical
13 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=3 X VR typical
14 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=1.5 X VR typical
15 VFM rated at 160A
16 For VFM: TJ=70°C; for IRM TJ = 125°C
17 For VFM: TJ=175°C; for IRM TJ = 125°C

Schottky Diodes

International
IOR Rectifier

Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A)	(T_C) (C)	V_{FM} @ I_{FM} 25°C (V)	E_{AS} (mJ)	I_{AR} (A)	I_{RM} @ V_{RWM} 25°C (mA)	Max. T_J (°C)	Notes	Fax-on-Demand	Outline
Center Tap										**TO-220AB**	
10CTQ150	150	10	145	0.86	6.75	0.3	7	175	2 6 7 14	20198	K4
12CTQ035	35	12	157	0.63	8	1.2	7	175	2 6 7 14	20054	
12CTQ040	40	12	157	0.63	8	1.2	7	175	2 6 7 14	20054	
12CTQ045	45	12	157	0.63	8	1.2	7	175	2 6 7 14	20054	
15CTQ035	35	15	123	0.65	10	1.5	32	150	2 6 7 14	20240	
MBR1535CT	35	15	105	0.72		1	15	150	2 6 7 12	20318	
15CTQ040	40	15	123	0.65	10	1.5	32	150	2 6 7 14	20240	
MBR1545CT	45	15	105	0.72		1	15	150	2 6 7 12	20318	
15CTQ045	45	15	123	0.65	10	1.5	32	150	2 6 7 14	20240	
16CTQ100	100	16	145	0.69	7.5	0.5	7	175	2 6 7 14	20192	
16CTQ080	80	16	145	0.69	7.5	0.5	7	175	2 6 7 14	20192	
MBR20100CT	100	20	133	0.7		0.5	150	150	2 6 7 12	20321	
MBR2035CT	35	20	135	0.72		1	15	150	2 6 7 12	20320	
20CTQ035	35	20	145	0.68	13	2	15	175	2 6 7 14	20056	
20CTQ040	40	20	145	0.68	13	2	15	175	2 6 7 14	20056	
MBR2045CT	45	20	135	0.72		1	15	150	2 6 7 12	20320	
20CTQ045	45	20	145	0.68	13	2	15	175	2 6 7 14	20056	
MBR2080CT	80	20	133	0.7		0.5	150	150	2 6 7 12	20321	
MBR2090CT	90	20	133	0.7		0.5	150	150	2 6 7 12	20321	
32CTQ030	30	30	109	0.53	13	3	97	150	2 6 7 14	20267	
MBR2535CT	35	30	130	0.73		1	40	150	2 6 7 12	20322	
25CTQ035	35	30	102	0.64	20	3	70	150	2 6 7 14	20242	
30CTQ035	35	30	127	0.7	20	3	15	175	2 6 7 14	20332	
25CTQ040	40	30	102	0.64	20	3	70	150	2 6 7 14	20242	
30CTQ040	40	30	127	0.7	20	3	15	175	2 6 7 14	20332	
30CTQ045	45	30	127	0.7	20	3	15	175	2 6 7 14	20332	
MBR2545CT	45	30	130	0.73		1	40	150	2 6 7 12	20322	
25CTQ045	45	30	102	0.64	20	3	70	150	2 6 7 14	20242	
30CTQ050	50	30	97	0.71	13	1.5	45	150	2 6 7 14	20300	
30CTQ060	60	30	97	0.71	13	1.5	45	150	2 6 7 14	20300	

2 For EAS: Tj = 25°C, IAS=IAR
5 Available on tape and reel. Refer to case outline.
6 Available with optional leadforms. Refer to case outline.
7 For VFM and IFM: TJ = 125°C unless otherwise noted.
8 For VFM: TJ = 25°C; for IRM TJ=125°C
9 For VFM: TJ = 75°C; for IRM TJ=100°C
10 For VFM: TJ = 25°C; for IRM TJ=100°C
11 For VFM: TJ = 125°C; for IRM TJ=125°C
12 Current decaying linearly to 0 in 2 µs. Frequency limited by TJ max. VA=1.5 X VR typical
13 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=3 X VR typical
14 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=1.5 X VR typical
15 VFM rated at 160A
16 For VFM: TJ=70°C; for IRM TJ = 125°C
17 For VFM: TJ=175°C; for IRM TJ = 125°C

Schottky Diodes

International
IOR Rectifier

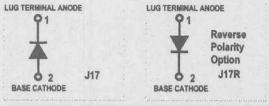
Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A)	(T_C) (C)	V_{FM} @ I_{FM} 25°C (V)	E_{AS} (mJ)	I_{AR} (A)	I_{RM} @ V_{RWM} 25°C (mA)	Max. T_J (°C)	Notes	Fax-on-Demand	Outline
Center Tap											TO-247AC
30CPQ100	100	30	140	0.81	7.5	0.5	7	175	2 7 14	20333	K5
30CPQ150	150	30	131	0.93	11.25	0.5	15	175	2 7 14	20299	
30CPQ035	35	30	124	0.64	20	3	70	150	2 7 14	20297	
MBR3035PT	35	30	105	0.72		2	100	150	2 7 14	20324	
30CPQ040	40	30	124	0.64	20	3	70	150	2 7 14	20297	
MBR3045PT	45	30	105	0.72		2	100	150	2 7 14	20324	
30CPQ045	45	30	124	0.64	20	3	70	150	2 7 14	20297	
30CPQ050	50	30	112	0.7	13	1.5	45	150	2 7 14	20298	
30CPQ060	60	30	112	0.7	13	1.5	45	150	2 7 14	20298	
30CPQ080	80	30	140	0.81	7.5	0.5	7	175	2 7 14	20333	
40CPQ100	100	40	145	0.75	11.25	0.75	15	175	2 7 14	20309	
40CPQ035	35	40	120	0.56	27	4	150	150	2 7 14	20307	
40CPQ040	40	40	120	0.56	27	4	150	175	2 7 14	20307	
40CPQ045	45	40	120	0.56	27	4	150	175	2 7 14	20307	
MBR4045PT	45	40	103	0.72	20	3	70	175	2 7 14	20343	
40CPQ050	50	40	120	0.64	18	2	96	150	2 7 14	20308	
40CPQ060	60	40	120	0.64	18	2	96	150	2 7 14	20308	
MBR4060PT	60	40	101	0.77	13	1.5	45	150	2 7 14	20344	
40CPQ080	80	40	145	0.75	11.25	0.75	15	175	2 7 14	20309	
MBR6045WT	45	60	100	0.69		2	150	150	2 7 14	20476	

2 For EAS: Tj = 25°C, IAS=IAR
5 Available on tape and reel. Refer to case outline.
6 Available with optional leadforms. Refer to case outline.
7 For VFM and IFM: TJ = 125°C unless otherwise noted.
8 For VFM: TJ = 25°C; for IRM TJ=125°C
9 For VFM: TJ = 75°C; for IRM TJ=100°C
10 For VFM: TJ = 25°C; for IRM TJ=100°C
11 For VFM: TJ = 125°C; for IRM TJ=125°C
12 Current decaying linearly to 0 in 2 µs. Frequency limited by TJ max. VA=1.5 X VR typical
13 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=3 X VR typical
14 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=1.5 X VR typical
15 VFM rated at 160A
16 For VFM: TJ=70°C; for IRM TJ = 125°C
17 For VFM: TJ=175°C; for IRM TJ = 125°C

Module
Discrete

D-67 Half-Pak

Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A) (C)	V_{FM} @ I_{FM} (V)	E_{AS} (mJ)	I_{AR} (A)	I_{RM} @ V_{RWM} (mA)	$R_{\Theta CS}$ (°C/W)	Max. T_J (°C)	Notes	Fax-on-Demand	Outline
120NQ040	40	120 99	0.52	81	12	400	0.4	150	2 3 7	20224	J17
120NQ045	45	120 99	0.52	81	12	400	0.4	150	2 3 7	20224	
120NQ045R	45	120 99	0.52	81	12	400	0.4	150	2 3 7	20224	
120NQ035	35	120 99	0.52	81	12	400	0.4	150	2 3 7	20224	
121NQ035	35	120 133	0.56	81	12	90	0.4	175	2 3 17	20249	
121NQ040	40	120 133	0.56	81	12	90	0.4	175	2 3 17	20249	
121NQ045	45	120 133	0.56	81	12	90	0.4	175	2 3 17	20249	
121NQ045R	45	120 133	0.56	81	12	90	0.4	175	2 3 17	20249	
122NQ030	30	120 110	0.41	54	12	560	0.4	150	2 3 7	20274	
122NQ030R	30	120 110	0.41	54	12	560	0.4	150	2 3 7	20274	
123NQ080	80	120 121	0.74	15	1	70	0.4	175	2 3 17	20250	
123NQ100	100	120 121	0.74	15	1	70	0.4	175	2 3 17	20250	
123NQ100R	100	120 121	0.74	15	1	70	0.4	175	2 3 17	20250	
125NQ015R	15	120 71	0.33	9	2	1780	0.4	100	2 3 9	20275	
125NQ015	15	120 71	0.33	9	2	1780	0.4	100	2 3 9	20275	
128NQ060	60	120 120	0.61	75	1	480	0.4	150	2 3 7		
128NQ060R	60	120 120	0.61	75	1	480	0.4	150	2 3 7		
129NQ150	150	120 139	0.74	290	1	45	0.4	175	2 3 7		
129NQ150R	150	120 139	0.74	290	1	45	0.4	175	2 3 7		
180NQ035	35	180 90	0.56	243	36	600	0.3	150	2 3 7	20227	
180NQ040	40	180 90	0.56	243	36	600	0.3	150	2 3 7	20227	
180NQ045	45	180 90	0.56	243	36	600	0.3	150	2 3 7	20227	
180NQ045R	45	180 90	0.56	243	36	600	0.3	150	2 3 17	20227	
181NQ035	35	180 125	0.56	243	36	135	0.3	175	2 3 17	20293	
181NQ040	40	180 125	0.56	243	36	135	0.3	175	2 3 17	20293	
181NQ045	45	180 125	0.56	243	36	135	0.3	175	2 3 17	20293	
181NQ045R	45	180 125	0.56	243	36	135	0.3	175	2 3 17	20293	
182NQ030R	30	180 107	0.41	162	36	840	0.3	150	2 3 7	20278	
182NQ030	30	180 107	0.41	162	36	840	0.3	150	2 3 7	20278	
183NQ080	80	180 116	0.74	15	1	105	0.3	175	2 3 7	20256	
183NQ100	100	180 116	0.74	15	1	105	0.3	175	2 3 7	20256	



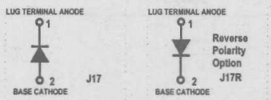
J17 J17R

2 For EAS: Tj = 25°C, IAS=IAR
5 Available on tape and reel. Refer to case outline.
6 Available with optional leadforms. Refer to case outline.
7 For VFM and IFM: TJ = 125°C unless otherwise noted.
8 For VFM: TJ = 25°C; for IRM TJ=125°C
9 For VFM: TJ = 75°C; for IRM TJ=100°C
10 For VFM: TJ = 25°C; for IRM TJ=100°C
11 For VFM: TJ = 125°C; for IRM TJ=125°C
12 Current decaying linearly to 0 in 2 µs. Frequency limited by TJ max. VA=1.5 X VR typical
13 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=3 X VR typical
14 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=1.5 X VR typical
15 VFM rated at 160A
16 For VFM: TJ=70°C; for IRM TJ = 125°C
17 For VFM: TJ=175°C; for IRM TJ = 125°C

Schottky Diodes

International
IOR Rectifier

Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A)	(C)	V_{FM} @ I_{FM} (V)	E_{AS} (mJ)	I_{AR} (A)	I_{RM} @ V_{RWM} (mA)	$R_{\Theta CS}$ (°C/W)	Max. T_J (°C)	Notes	Fax-on-Demand	Outline
183NQ100R	100	180	116	0.74	15	1	105	0.3	175	2 3 7	20256	J17
185NQ015	15	180	66	0.34	9	2	2670	0.3	100	2 3 9	20279	
185NQ015R	15	180	66	0.34	9	2	2670	0.3	100	2 3 9	20279	
188NQ060	60	180	120	0.61	75	1	720	0.3	150	2 3 7		
188NQ060R	60	180	120	0.61	75	1	720	0.3	150	2 3 7		
189NQ150	150	180	134	0.74	290	1	65	0.3	175	2 3 7		
189NQ150R	150	180	134	0.74	290	1	65	0.3	175	2 3 7		
240NQ040	40	240	96	0.55	324	48	800	0.2	150	2 3 7	20230	
240NQ045	45	240	96	0.55	324	48	800	0.2	150	2 3 7	20230	
240NQ045R	45	240	96	0.55	324	48	800	0.2	150	2 3 7	20230	
240NQ035	35	240	96	0.55	324	48	800	0.2	150	2 3 7	20230	
241NQ035	35	240	130	0.59	324	48	180	0.2	175	2 3 17	20261	
241NQ045R	45	240	130	0.59	324	48	180	0.2	175	2 3 17	20261	
241NQ040	40	240	130	0.59	324	48	180	0.2	175	2 3 17	20261	
241NQ045	45	240	130	0.59	324	48	180	0.2	175	2 3 17	20261	
242NQ030	30	240	111	0.42	216	48	1120	0.2	150	2 3 7	20281	
242NQ030R	30	240	111	0.42	216	48	1120	0.2	150	2 3 7	20281	
243NQ080	80	240	120	0.74	15	1	140	0.2	175	2 3 17	20261	
243NQ100	100	240	120	0.74	15	1	140	0.2	175	2 3 17	20261	
243NQ100R	100	240	120	0.74	15	1	140	0.2	175	2 3 17	20261	
245NQ015	15	240	70	0.34	9	2	3560	0.2	100	2 3 9	20296	
245NQ015R	15	240	70	0.34	9	2	3560	0.2	100	2 3 9	20296	
248NQ060	60	240	120	0.61	75	1	960	0.2	150	2 3 7		
248NQ060R	60	240	120	0.61	75	1	960	0.2	150	2 3 7		
249NQ150R	150	240	139	0.74	290	1	85	0.2	175	2 3 7		
249NQ150	150	240	139	0.74	290	1	85	0.2	175	2 3 7		



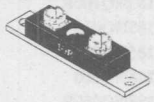
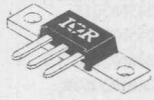
J17 J17R

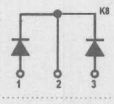
2 For EAS: Tj = 25°C, IAS=IAR
6 Available with optional leadforms. Refer to case outline.
8 For VFM: TJ = 25°C; for IRM TJ=125°C
10 For VFM: TJ = 25°C; for IRM TJ=100°C
12 Current decaying linearly to 0 in 2 µs. Frequency limited by TJ max. VA=1.5 X VR typical
14 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=1.5 X VR typical
16 For VFM: TJ=70°C; for IRM TJ = 125°C

5 Available on tape and reel. Refer to case outline.
7 For VFM and IFM: TJ = 125°C unless otherwise noted.
9 For VFM: TJ = 75°C; for IRM TJ=100°C
11 For VFM: TJ = 125°C; for IRM TJ=125°C
13 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=3 X VR typical
15 VFM rated at 160A
17 For VFM: TJ=175°C; for IRM TJ = 125°C

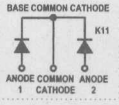
Schottky Diodes

International
IOR Rectifier

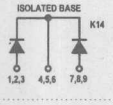
Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A) (C)	V_{FM} @ I_{FM} (V)	E_{AS} (mJ)	I_{AR} (A)	I_{RM} @ V_{RWM} (mA)	$R_{\Theta CS}$ (°C/W)	Max. T_J (°C)	Notes	Fax-on-Demand	Outline
Module Doubler									TO-244AB Non-Isolated 		
203DNQ100	100	200 120	0.72	15	1	0.7	0.4	175	2 3 7		K18
203DMQ100	100	200 100	0.72	15	1	0.7	0.7	175	2 3 7		
209DMQ150	150	200 97	0.8	32	1	50	0.7	175	2 3 7		
209DNQ150	150	200 100	0.8	32	1	50	0.4	175	2 3 7		
400DMQ045	45	400 60	0.62	180	40	800	0.5	150	2 3 7		
Module Center Tap									D61-6-SL 		
60CNQ045SL	45	60 116	0.44	40	6	200	0.85	150	2 3 7	20195	K10
61CNQ045SL	45	60 149	0.49	40	6	45	0.85	175	2 3 7	20248	
62CNQ030SL	30	60 135	0.35	27	6	280	0.85	150	2 3 7	20269	
63CNQ100SL	100	60 155	0.64	15	1	35	0.85	175	2 3 7	20223	
Module Center Tap									D61-8 		
80CNQ045	45	80 109	0.47	54	8	200	0.85	150	2 3 7	20216	K11
80CNQ035	35	80 109	0.47	54	8	200	0.85	150	2 3 7	20216	
80CNQ040	40	80 109	0.47	54	8	200	0.85	150	2 3 7	20216	
81CNQ035	35	80 141	0.54	54	8	45	0.85	175	2 3 7	20237	
81CNQ040	40	80 141	0.54	54	8	45	0.85	175	2 3 7	20237	
81CNQ045	45	80 141	0.54	54	8	45	0.85	175	2 3 7	20237	
81CNQ050	50	80 141	0.54	54	8	45	0.85	175	2 3 7	20237	
82CNQ030	30	80 119	0.35	36	8	280	0.85	150	2 3 7	20270	
83CNQ080	80	80 132	0.67	15	1	35	0.85	175	2 3 7	20221	
83CNQ100	100	80 132	0.67	15	1	35	0.85	175	2 3 7	20221	
85CNQ015	15	80 78	0.32	9	2	890	0.85	100	2 3 7	20271	
88CNQ060	60	80 95	0.56	75	1	240	0.85	150	2 3 7	20494	
89CNQ150	150	80 117	0.69	190	1	21	0.85	175	2 3 7	20495	



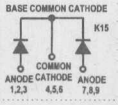
K8, K9, K10



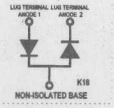
K11, K12, K13, K17



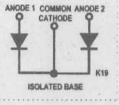
K14



K15, K16



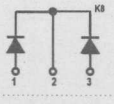
K18



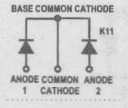
K19

2 For EAS: Tj = 25°C, IAS=IAR
5 Available on tape and reel. Refer to case outline.
6 Available with optional leadforms. Refer to case outline.
7 For VFM and IFM: TJ = 125°C unless otherwise noted.
8 For VFM: TJ = 25°C; for IRM TJ=125°C
9 For VFM: TJ = 75°C; for IRM TJ=100°C
10 For VFM: TJ = 25°C; for IRM TJ=100°C
11 For VFM: TJ = 125°C; for IRM TJ=125°C
12 Current decaying linearly to 0 in 2 µs. Frequency limited by TJ max. VA=1.5 X VR typical
13 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=3 X VR typical
14 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=1.5 X VR typical
15 VFM rated at 160A
16 For VFM: TJ=70°C; for IRM TJ = 125°C
17 For VFM: TJ=175°C; for IRM TJ = 125°C

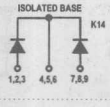
Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A) (C)	V_{FM} @ I_{FM} (V)	E_{AS} (mJ)	I_{AR} (A)	I_{RM} @ V_{RWM} (mA)	$R_{\Theta CS}$ (°C/W)	Max. T_J (°C)	Notes	Fax-on-Demand	Outline
Module Center Tap										D61-8-SM	
80CNQ045SM	45	80	109	0.47	54	8	200	0.85	150	2 3 7	20216	K12
81CNQ045SM	45	80	141	0.54	54	8	45	0.85	175	2 3 7	20237	
81CNQ050SM	50	80	141	0.54	54	8	45	0.85	175	2 3 7	20237	
82CNQ030SM	30	80	119	0.35	36	8	280	0.85	150	2 3 7	20270	
83CNQ100SM	100	80	132	0.67	15	1	35	0.85	175	2 3 7	20221	
85CNQ015SM	15	80	78	0.32	9	2	890	0.85	100	2 3 7	20271	
Module Center Tap										D61-8-SL	
80CNQ045SL	45	80	109	0.47	54	8	200	0.85	150	2 3 7	20216	K13
81CNQ050SL	50	80	141	0.54	54	8	45	0.85	175	2 3 7	20237	
81CNQ045SL	45	80	141	0.54	54	8	45	0.85	175	2 3 7	20237	
82CNQ030SL	30	80	119	0.35	36	8	280	0.85	150	2 3 7	20270	
83CNQ100SL	100	80	132	0.67	15	1	35	0.85	175	2 3 7	20221	
85CNQ015SL	15	80	78	0.32	9	2	890	0.85	100	2 3 7	20271	
Module Center Tap										D-60 Isolated	
150CMQ035	35	150	71	0.6	101	15	200	1	150	2 3 7	20251	K14
150CMQ040	40	150	71	0.6	101	15	200	1	150	2 3 7	20251	
150CMQ045	45	150	71	0.6	101	15	200	1	150	2 3 7	20251	
151CMQ035	35	150	104	0.65	101	15	45	1	175	2 3 7	20252	
151CMQ040	40	150	104	0.65	101	15	45	1	175	2 3 7	20252	
151CMQ045	45	150	104	0.65	101	15	45	1	175	2 3 7	20252	
152CMQ030	30	150	85	0.47	68	15	280	1	150	2 3 7	20276	
153CMQ080	80	150	90	0.8	15	1	35	1	175	2 3 7	20253	
153CMQ100	100	150	90	0.8	15	1	35	1	175	2 3 7	20253	



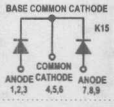
K8, K9, K10



K11, K12, K13, K17

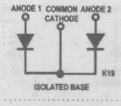


K14



K15, K16

K18



K19

2 For EAS: Tj = 25°C, IAS=IAR
5 Available on tape and reel. Refer to case outline.
6 Available with optional leadforms. Refer to case outline.
7 For VFM and IFM: TJ = 125°C unless otherwise noted.
8 For VFM: TJ = 25°C; for IRM TJ=125°C
9 For VFM: TJ = 75°C; for IRM TJ=100°C
10 For VFM: TJ = 25°C; for IRM TJ=100°C
11 For VFM: TJ = 125°C; for IRM TJ=125°C
12 Current decaying linearly to 0 in 2 µs. Frequency limited by TJ max. VA=1.5 X VR typical
13 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=3 X VR typical
14 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=1.5 X VR typical
15 VFM rated at 160A
16 For VFM: TJ=70°C; for IRM TJ = 125°C
17 For VFM: TJ=175°C; for IRM TJ = 125°C

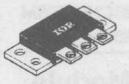
Module
Center Tap

D-60 Non-Isolated

Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A) (C)	V_{FM} @ I_{FM} (V)	E_{AS} (mJ)	I_{AR} (A)	I_{RM} @ V_{RWM} (mA)	$R_{\theta CS}$ (°C/W)	Max. T_J (°C)	Notes	Fax-on-Demand	Outline
150CNQ045	45	150 86	0.6	101	15	200	0.8	150	2 3 7		K15
151CNQ045	45	150 118	0.65	101	15	45	0.8	175	2 3 7		
153CNQ100	100	150 107	0.8	15	1	35	0.8	175	2 3 7		

Module
Center Tap

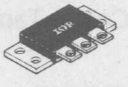
TO-249AA Isolated



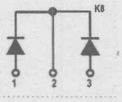
Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A) (C)	V_{FM} @ I_{FM} (V)	E_{AS} (mJ)	I_{AR} (A)	I_{RM} @ V_{RWM} (mA)	$R_{\theta CS}$ (°C/W)	Max. T_J (°C)	Notes	Fax-on-Demand	Outline
160CMQ035	35	160 69	0.6	108	16	200	1	150	2 3 7	20254	K16
160CMQ040	40	160 69	0.6	108	16	200	1	150	2 3 7	20254	
160CMQ045	45	160 69	0.6	108	16	200	1	150	2 3 7	20254	
161CMQ035	35	160 101	0.63	108	16	45	1	175	2 3 7	20174	
161CMQ040	40	160 101	0.63	108	16	45	1	175	2 3 7	20174	
161CMQ045	45	160 101	0.63	108	16	45	1	175	2 3 7	20174	
162CMQ030	30	160 83	0.46	72	16	280	1	150	2 3 7	20277	
163CMQ100	100	160 87	0.82	15	1	35	1	175	2 3 7	20255	
163CMQ080	80	160 87	0.82	15	1	35	1	175	2 3 7	20255	
168CMQ060	60	160 96	0.67	75	1	240	1	150	2 3 7		

Module
Center Tap

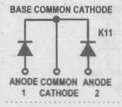
TO-249AA Non-Isolated



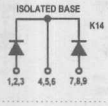
Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A) (C)	V_{FM} @ I_{FM} (V)	E_{AS} (mJ)	I_{AR} (A)	I_{RM} @ V_{RWM} (mA)	$R_{\theta CS}$ (°C/W)	Max. T_J (°C)	Notes	Fax-on-Demand	Outline
160CNQ045	45	160 100	0.6	108	16	200	0.8	150	2 3 7		K17
161CNQ045	45	160 120	0.63	108	16	45	0.8	175	2 3 7		
162CNQ030	30	160 107	0.46	72	16	280	0.8	150	2 3 7		
163CNQ100	100	160 112	0.82	15	1	35	0.8	175	2 3 7		



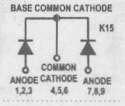
K8, K9, K10



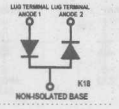
K11, K12, K13, K17



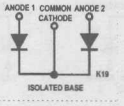
K14



K15, K16



K18

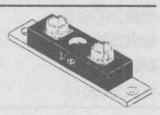


K19

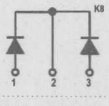
2 For EAS: Tj = 25°C, IAS=IAR
5 Available on tape and reel. Refer to case outline.
6 Available with optional leadforms. Refer to case outline.
7 For VFM and IFM: TJ = 125°C unless otherwise noted.
8 For VFM: TJ = 25°C; for IRM TJ=125°C
9 For VFM: TJ = 75°C; for IRM TJ=100°C
10 For VFM: TJ = 25°C; for IRM TJ=100°C
11 For VFM: TJ = 125°C; for IRM TJ=125°C
12 Current decaying linearly to 0 in 2 µs. Frequency limited by TJ max. VA=1.5 X VR typical
13 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=3 X VR typical
14 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=1.5 X VR typical
15 VFM rated at 160A
16 For VFM: TJ=70°C; for IRM TJ = 125°C
17 For VFM: TJ=175°C; for IRM TJ = 125°C

Module
Center Tap

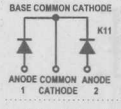
TO-244AB Non-Isolated



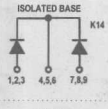
Part Number	V_{RRM} (V)	I_{FAV} @ T_C (C)	V_{FM} @ I_{FM} (V)	E_{AS} (mJ)	I_{AR} (A)	I_{RM} @ V_{RWM} (mA)	$R_{\Theta CS}$ (°C/W)	Max. T_J (°C)	Notes	Fax-on-Demand	Outline
200CNQ045	45	200	108	0.49	135	20	400	0.4	150	2 3 7	20257	K18
200CNQ040	40	200	108	0.49	135	20	400	0.4	150	2 3 7	20257	
200CNQ035	35	200	108	0.49	135	20	400	0.4	150	2 3 7	20257	
201CNQ035	35	200	138	0.58	135	20	90	0.4	175	2 3 17	20258	
201CNQ050	50	200	138	0.58	135	20	90	0.4	175	2 3 17	20258	
201CNQ040	40	200	138	0.58	135	20	90	0.4	175	2 3 17	20258	
201CNQ045	45	200	138	0.58	135	20	90	0.4	175	2 3 17	20258	
203CNQ100	100	200	130	0.72	15	1	70	0.4	175	2 3 17	20259	
203CNQ080	80	200	130	0.72	15	1	70	0.4	175	2 3 17	20259	
208CNQ060	60	200	106	0.75	75	1	480	0.4	150	2 3 7		
209CNQ150	150	200	131	0.8	32	1	50	0.4	175	2 3 7		
220CNQ030	30	200	114	0.4	99	22	560	0.4	150	2 3 7	20280	
220CNQ025	25	200	114	0.4	99	22	560	0.4	150	2 3 7	20280	
225CNQ015	15	220	74	0.32	9	2	2000	0.4	100	2 3 9	20294	
300CNQ045	45	300	96	0.62	160	30	600	0.4	150	2 3 7		
300CNQ035	35	300	100	0.62	160	30	600	0.4	150	2 3 7		
300CNQ040	40	300	98	0.62	160	30	600	0.4	150	2 3 7		
301CNQ040	40	300	120	0.59	202	30	90	0.4	175	2 3 17	20177	
301CNQ045	45	300	120	0.59	202	30	90	0.4	175	2 3 17	20177	
301CNQ050	50	300	120	0.59	202	30	90	0.4	175	2 3 17	20177	
301CNQ035	35	300	120	0.59	202	30	90	0.4	175	2 3 17	20177	
303CNQ100	100	300	126	0.72	15	1	105	0.3	175	2 3 7	20234	
303CNQ080	80	300	126	0.72	15	1	105	0.3	175	2 3 7	20234	
309CNQ150	150	300	125	0.85	190	1	75	0.3	175	2 3 7		
400CNQ035	35	400	105	0.52	180	40	800	0.2	150	2 3 7	20264	
400CNQ040	40	400	105	0.52	180	40	800	0.2	150	2 3 7	20264	
400CNQ045	45	400	105	0.52	180	40	800	0.2	150	2 3 7	20264	
401CNQ035	35	400	138	0.56	270	40	180	0.2	175	2 3 17	20263	
401CNQ040	40	400	138	0.56	270	40	180	0.2	175	2 3 17	20263	
401CNQ045	45	400	138	0.56	270	40	180	0.2	175	2 3 17	20263	
403CNQ080	80	400	105	0.72	15	1	140	0.2	175	2 3 17	20214	
403CNQ100	100	400	105	0.72	15	1	140	0.2	175	2 3 17	20214	



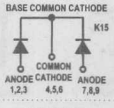
K8, K9, K10



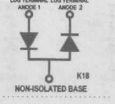
K11, K12, K13, K17



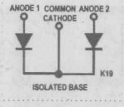
K14



K15, K16



K18

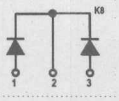


K19

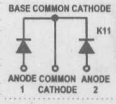
2 For EAS: Tj = 25°C, IAS=IAR
5 Available on tape and reel. Refer to case outline.
6 Available with optional leadforms. Refer to case outline.
7 For VFM and IFM: TJ = 125°C unless otherwise noted.
8 For VFM: TJ = 25°C; for IRM TJ=125°C
9 For VFM: TJ = 75°C; for IRM TJ=100°C
10 For VFM: TJ = 25°C; for IRM TJ=100°C
11 For VFM: TJ = 125°C; for IRM TJ=125°C
12 Current decaying linearly to 0 in 2 µs. Frequency limited by TJ max. VA=1.5 X VR typical
13 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=3 X VR typical
14 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=1.5 X VR typical
15 VFM rated at 160A
16 For VFM: TJ=70°C; for IRM TJ = 125°C
17 For VFM: TJ=175°C; for IRM TJ = 125°C

Schottky Diodes

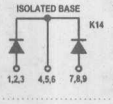
Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A)	(C)	V_{FM} @ I_{FM} (V)	E_{AS} (mJ)	I_{AR} (A)	I_{RM} @ V_{RWM} (mA)	$R_{\Theta CS}$ (°C/W)	Max. T_J (°C)	Notes	Fax-on-Demand	Outline
408CNQ060	60	400	49	0.88	75	1	960	0.2	150	2 3 7		K18
409CNQ150	150	400	128	0.85	190	1	90	0.2	175	2 3 7		
440CNQ030	30	440	115	0.41	198	44	1120	0.2	150	2 3 7	20282	
445CNQ015	15	440	75	0.47	18	4	4000	0.2	100	2 3 7 13		
Module Center Tap											TO-244AB Isolated	
201CMQ045	45	200	110	0.58	135	20	90	0.7	175	2 3 7		K19
203CMQ100	100	200	100	0.72	15	1	70	0.7	175	2 3 7		
208CMQ060	60	200	95	0.75	75	1	480	0.5	150	2 3 7		
209CMQ150	150	200	97	0.8	32	1	50	0.7	175	2 3 7		
220CMQ030	30	220	95	0.4	99	22	560	0.7	150	2 3 7		
401CMQ045	45	400	120	0.56	270	40	180	0.5	175	2 3 7		
403CMQ100	100	400	85	0.72	15	1	140	0.5	175	2 3 7		
408CMQ060	60	400	109	0.88	75	1	960	0.5	150	2 3 7		
440CMQ030	30	440	63	0.41	198	44	1120	0.5	150	2 3 7		
Module Center Tap											D61-6	
60CNQ045	45	60	116	0.44	40	6	200	0.85	150	2 3 7	20195	K8
60CNQ035	35	60	116	0.44	40	6	200	0.85	150	2 3 7	20195	
60CNQ040	40	60	116	0.44	40	6	200	0.85	150	2 3 7	20195	
61CNQ040	40	60	149	0.49	40	6	45	0.85	175	2 3 7	20248	
61CNQ045	45	60	149	0.49	40	6	45	0.85	175	2 3 7	20248	
61CNQ035	35	60	149	0.49	40	6	45	0.85	175	2 3 7	20248	
62CNQ030	30	60	135	0.35	27	6	280	0.85	150	2 3 7	20269	
63CNQ080	80	60	155	0.64	15	1	35	0.85	175	2 3 7	20223	
63CNQ100	100	60	155	0.64	15	1	35	0.85	175	2 3 7	20223	



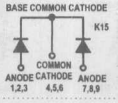
K8, K9, K10



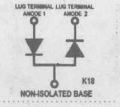
K11, K12, K13, K17



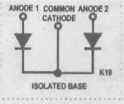
K14



K15, K16



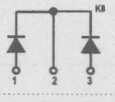
K18



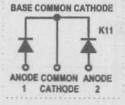
K19

2 For EAS: Tj = 25°C, IAS=IAR
5 Available on tape and reel. Refer to case outline.
6 Available with optional leadforms. Refer to case outline.
7 For VFM and IFM: TJ = 125°C unless otherwise noted.
8 For VFM: TJ = 25°C; for IRM TJ=125°C
9 For VFM: TJ = 75°C; for IRM TJ=100°C
10 For VFM: TJ = 25°C; for IRM TJ=100°C
11 For VFM: TJ = 125°C; for IRM TJ=125°C
12 Current decaying linearly to 0 in 2 µs. Frequency limited by TJ max. VA=1.5 X VR typical
13 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=3 X VR typical
14 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=1.5 X VR typical
15 VFM rated at 160A
16 For VFM: TJ=70°C; for IRM TJ = 125°C
17 For VFM: TJ=175°C; for IRM TJ = 125°C

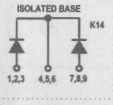
Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A) (C)	V_{FM} @ I_{FM} (V)	E_{AS} (mJ)	I_{AR} (A)	I_{RM} @ V_{RWM} (mA)	$R_{\Theta CS}$ (°C/W)	Max. T_J (°C)	Notes	Fax-on-Demand	Outline
Module Center Tap										D61-6-SM	
60CNQ045SM	45	60 116	0.44	40	6	200	0.85	150	2 3 7	20195	K9
61CNQ045SM	45	60 149	0.49	40	6	45	0.85	175	2 3 7	20248	
62CNQ030SM	30	60 135	0.35	27	6	280	0.85	150	2 3 7	20269	
63CNQ100SM	100	60 155	0.64	15	1	35	0.85	175	2 3 7	20223	



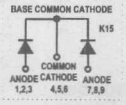
K8, K9, K10



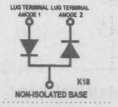
K11, K12, K13, K17



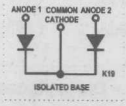
K14



K15, K16



K18



K19

2 For EAS: Tj = 25°C, IAS=IAR
5 Available on tape and reel. Refer to case outline.
6 Available with optional leadforms. Refer to case outline.
7 For VFM and IFM: TJ = 125°C unless otherwise noted.
8 For VFM: TJ = 25°C; for IRM TJ=125°C
9 For VFM: TJ = 75°C; for IRM TJ=100°C
10 For VFM: TJ = 25°C; for IRM TJ=100°C
11 For VFM: TJ = 125°C; for IRM TJ=125°C
12 Current decaying linearly to 0 in 2 µs. Frequency limited by TJ max. VA=1.5 X VR typical
13 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=3 X VR typical
14 Current decaying linearly to 0 in 1 µs. Frequency limited by TJ max. VA=1.5 X VR typical
15 VFM rated at 160A
16 For VFM: TJ=70°C; for IRM TJ = 125°C
17 For VFM: TJ=175°C; for IRM TJ = 125°C

Schottky Die

International
IOR Rectifier

Wafer Part Number	Die Part Number	Die 'A' Length/Side (in.)	mm	Bond Pad 'B' Length/Side (in.)	mm	Anode metaliization (topside)	Process	Tray quantity	Equivalent Finished Product(s)			
SC043S040SWB	N/A	(.043)	1.1	(.036)	1.1	Ag	Standard	N/A	10BQ	11DQ		
SC043S060SWB	N/A	(.043)	1.1	(.036)	1.1	Ag	Standard	N/A	10BQ	11DQ		
SC043H100SWB	N/A	(.043)	1.1	(.036)	1.1	Ag	830	N/A	10BQ	11DQ		
SC043R100SWB	N/A	(.043)	1.1	(.036)	1.1	Ag	OR'ing	N/A	10BQ	11DQ		
SC066S040AWB	N/A	(.066)	1.68	(.059)	1.68	Al	Standard	N/A	6CWQ	30WQ	50WQ	
SC066S040SWB	N/A	(.066)	1.68	(.059)	1.68	Ag	Standard	N/A	31DQ			
SC066S060AWB	N/A	(.066)	1.68	(.059)	1.68	Al	Standard	N/A	6CWQ	30WQ	50WQ	
SC066S060SWB	N/A	(.066)	1.68	(.059)	1.68	Ag	Standard	N/A	31DQ			
SC066H100SWB	N/A	(.066)	1.68	(.059)	1.68	Ag	830	N/A	31DQ			
SC066H100AWB	N/A	(.066)	1.68	(.059)	1.68	Al	830	N/A	6CWQ	30WQ	50WQ	
SC090S045AWB	SC090S045A	(.090)	2.29	(.070)	2.29	Al	Standard	196	15CTQ			
SC090H045AWB	SC090H045A	(.090)	2.29	(.070)	2.29	Al	830	196	12CTQ			
SC090H150AWB	SC090H150A	(.090)	2.29	(.070)	2.29	Al	830	196	10CTQ			
SC125R015SWB	SC125R015S	(.125)	2.29	(.105)	2.29	Ag	OR'ing	100	95SQ			
SC125S030AWB	SC125S030A	(.125)	2.29	(.105)	2.29	Al	Standard	100	32CTQ			
SC125S045SWB	SC125S045S	(.125)	2.29	(.105)	2.29	Ag	Standard	100	90SQ			
SC125S045AWB	SC125S045A	(.125)	2.29	(.105)	2.29	Al	Standard	100	25CTQ	30CPQ		
SC125H045AWB	SC125H045A	(.125)	2.29	(.105)	2.29	Al	830	100	10TQ	20CTQ	30CTQ	
SC125H045SWB	SC125H045S	(.125)	2.29	(.105)	2.29	Ag	830	100	80SQ			
SC125S060AWB	SC125S060A	(.125)	2.29	(.105)	2.29	Al	Standard	100	30CPQ			
SC125H100SWB	SC125H100S	(.125)	2.29	(.105)	2.29	Ag	830	100	50SQ			
SC125H100AWB	SC125H100A	(.125)	2.29	(.105)	2.29	Al	830	100	8TQ	16CTQ	30CPQ	
SC125H150AWB	SC125H150A	(.125)	2.29	(.105)	2.29	Al	830	100	30CPQ			
SC150R015AWB	SC150R015A	(.150)	3.81	(.130)	3.81	Al	OR'ing	49	19TQ			
SC150S045AWB	SC150S045A	(.150)	3.81	(.130)	3.81	Al	Standard	49	20TQ			
SC150H045AWB	SC150H045A	(.150)	3.81	(.130)	3.81	Al	830	49	18TQ	40CDQ	60CDQ	SD241
SC175H045SWB	SC175H045S	(.175)	4.45	(.155)	4.45	Ag	830	49	30FQ	1N6391		
SC175S045AWB	SC175S045A	(.175)	4.45	(.155)	4.45	Al	Standard	49	40CPQ			
SC175S045SWB	SC175S045S	(.175)	4.45	(.155)	4.45	Ag	Standard	49	20FQ	21FQ	1N6096	SD41
SC175S060AWB	SC175S060A	(.175)	4.45	(.155)	4.45	Al	Standard	49	40CPQ			
SC175H100AWB	SC175H100A	(.175)	4.45	(.155)	4.45	Al	830	49	40CPQ			

NOTES: 1. Wafer Part Number = Die in probed, un-cut wafer for
2. Die Part Number = Die in probed, waffle pack form.
3. All die and bond pads are square.

Part Number Coding Table

SC	SC=Schottky Chip		
125	die size in inches X 1000		
H	H= 830 high temperature	R=OR'ing lowest VF	S= standard voltage
045	voltage		
A	A= aluminum	S = silver	

Schottky Die

International
IOR Rectifier

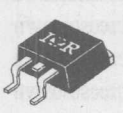
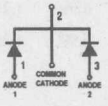
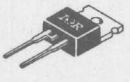
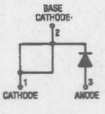
Wafer Part Number	Die Part Number	Die 'A' Length/Side (in.)	mm	Bond Pad 'B' Length/Side (in.)	mm	Anode metaliization (topside)	Process	Tray quantity	Equivalent Finished Product(s)			
SC175H100SWB	SC175H100S	(.175)	4.45	(.155)	4.45	Ag	830	49	30FQ			
SC200R015SWB	SC200R015S	(.200)	5.08	(.180)	5.08	Ag	OR'ing	36	85CNQ			
SC200S030SWB	SC200S030S	(.200)	5.08	(.180)	5.08	Ag	Standard	36	62CNQ	82CNQ		
SC200S030SWB	SC200S030S	(.200)	5.08	(.180)	5.08	Ag	Standard	36	55HQ	62CMQ	162CMQ	
SC200S030SWB	SC200S030S	(.200)	5.08	(.180)	5.08	Ag	Standard	36	132CNQ	220CNQ	440CNQ	
SC200H045SWB	SC200H045S	(.200)	5.08	(.180)	5.08	Ag	830	36	61CNQ	81CNQ	121CNQ	
SC200S045SWB	SC200S045S	(.200)	5.08	(.180)	5.08	Ag	Standard	36	50HQ	51HQ	SD51	
SC200S045SWB	SC200S045S	(.200)	5.08	(.180)	5.08	Ag	Standard	36	60CMQ	161CMQ	60CNQ	80CNQ
SC200H045SWB	SC200H045S	(.200)	5.08	(.180)	5.08	Ag	830	36	201CNQ	301CNQ	401CNQ	
SC200H045SWB	SC200H045S	(.200)	5.08	(.180)	5.08	Ag	830	36	75HQ	85HQ	61CMQ	161CMQ
SC200S045SWB	SC200S045S	(.200)	5.08	(.180)	5.08	Ag	Standard	36	120CNQ	200CNQ	400CNQ	
SC200H100SWB	SC200H100S	(.200)	5.08	(.180)	5.08	Ag	830	36	63CNQ	83CNQ	203CNQ	
SC200H100SWB	SC200H100S	(.200)	5.08	(.180)	5.08	Ag	830	36	60HQ	63CMQ	163CMQ	
SC200H100SWB	SC200H100S	(.200)	5.08	(.180)	5.08	Ag	830	36	303CNQ	403CNQ		
SC275S030SWB	SC275S030S	(.275)	6.99	(.255)	6.99	Ag	Standard	25	N/A			
SC275S045SWB	SC275S045S	(.275)	6.99	(.255)	6.99	Ag	Standard	25	N/A			
SC275H045SWB	SC275H045S	(.275)	6.99	(.255)	6.99	Ag	830	25	N/A			
SC275H100SWB	SC275H100S	(.275)	6.99	(.255)	6.99	Ag	830	25	N/A			

NOTES: 1. Wafer Part Number = Die in probed, un-cut wafer for
2. Die Part Number = Die in probed, waffle pack form.
3. All die and bond pads are square.

Part Number Coding Table

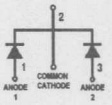
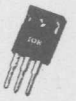
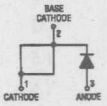
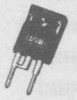
SC	SC=Schottky Chip		
125	die size in inches X 1000		
H	H= 830 high temperature	R=OR'ing lowest VF	S= standard voltage
045	voltage		
A	A= aluminum	S = silver	

Discrete

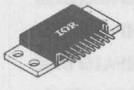
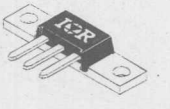
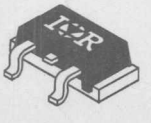
Part Number	V_{RRM} (V)	I_{FAV} @ T_C per pkg. (A)	(C)	V_{FM} @ I_{FM} (A)	IR @ V_{RWM} (μA)	Max I_{RRM} (A)	Max t_{rr} (mA)	$R_{\Theta JC}$ per pkg. (°C/W)	Notes	Fax-on-Demand	Outline
D²Pak											
HFA04TB60S	600	4	106	1.8	3	5.2	42	5	2 7	20399	K3
HFA08TA60CS	600	8	100	1.8	3	5.2	42	2.5	3 4 5 7		
HFA08TB60S	600	8	90	1.7	5	5	55	3.5	2 7	20341	
HFA15TB60S	600	15	100	1.7	10	6	60	1.7	2 7	20334	
HFA16TA60CS	600	16	90	1.7	5	5	55	1.75	3 4 5 7	20340	
HFA25TB60S	600	25	100	1.7	20	10	75	0.83	2 4 7	20339	
HFA30TA60CS	600	30	100	1.7	10	6	60	0.85	3 4 7	20335	
HFA06TB120S	1200	6	100	3	5	4.4	26	2	2 7	20383	
HFA08TB120S	1200	8	91	3	10	4.5	28	1.7	2 7	20383	
HFA16TB120S	1200	16	98	3	20	5.8	30	0.83	2 7	20384	
TO-220AB											
											
HFA08TA60C	600	8	100	1.8	3	5.2	42	2.5	2 4 5 7		J9
HFA16TA60C	600	16	90	1.7	5	5	55	1.75	2 5 7	20340	
HFA30TA60C	600	30	100	1.7	10	6	60	0.85	2 4 5 7	20335	
HFA08TB120	1200	8	91	3	10	4.5	28	1.7	4 5 7	20383	
TO-220AC											
											
HFA04TB60	600	4	106	1.8	3	5.2	42	5	7	20399	J11
HFA08TB60	600	8	90	1.7	5	5	55	3.5	7	20341	
HFA15TB60	600	15	100	1.7	10	6	60	1.7	7	20334	
HFA25TB60	600	25	100	1.7	20	10	75	0.83	7	20339	
HFA06TB120	1200	6	100	3	5	4.4	26	2	7	20382	
HFA16TB120	1200	16	98	3	20	5.8	30	0.83	7	20384	

2 Available with optional leadforms. Refer to case outline for details.
3 Available on tape-and-reel. Refer to case outline for details.
4 For center tap devices, the IF(AV) per leg is ½ that shown in the IF(AV) column.
5 All specifications given per leg, unless otherwise noted.
7 Reverse recovery characteristics @ IF = IF(AV) per leg: DIF/Dt=200A/μs, VR=200V

Discrete

Part Number	V_{RRM} (V)	I_{FAV} @ T_C per pkg. (A)	(C)	V_{FM} @ I_{FM} (A)	IR @ V_{RWM} (μA)	Max I_{RRM} (A)	Max t_{rr} (mA)	$R_{\Theta JC}$ per pkg. (°C/W)	Notes	Fax-on-Demand	Outline
										TO-247AC 	
HFA16PA60C	600	16	90	1.7	5	5	55	1.75	5 7		J13
HFA30PA60C	600	30	100	1.7	10	6	60	0.85	5 7	20336	
HFA50PA60C	600	50	100	1.7	20	10	75	0.42	5 7	20337	
HFA32PA120C	1200	16	98	3	20	5.8	30	0.83	5 7	20360	
										TO-247AC (modified) 	
HFA08PB60	600	8	90	1.7	5	5	55	3.5	5 7		J12
HFA15PB60	600	15	100	1.7	10	6	60	1.7	5 7	20340	
HFA25PB60	600	25	100	1.7	20	10	75	0.83	5 7	20338	
HFA06PB120	1200	6	100	3	5	4.4	26	2	5 7	20363	
HFA08PB120	1200	8	91	3	10	4.5	28	1.7	5 7	20365	
HFA16PB120	1200	16	98	3	20	5.8	30	0.83	5 7	20364	
HFA30PB120	1200	30		3	40	8.1	37	0.55	5 7	20398	

2 Available with optional leadforms. Refer to case outline for details.
3 Available on tape-and-reel. Refer to case outline for details.
4 For center tap devices, the IF(AV) per leg is ½ that shown in the IF(AV) column.
5 All specifications given per leg, unless otherwise noted.
7 Reverse recovery characteristics @ IF = IF(AV) per leg: DIF/Dt=200A/μs, VR=200V

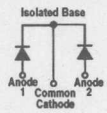
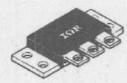
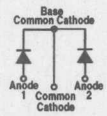
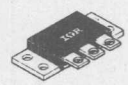
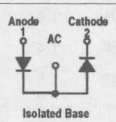
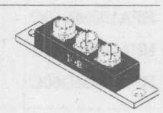
Part Number	V_{RRM} (V)	I_{FAV} @ T_C per pkg. (A)	(C)	V_{FM} @ I_{FM} (A)	IR @ V_{RWM} (µA)	Max I_{RRM} (A)	Max t_{rr} (mA)	$R_{\Theta JC}$ per pkg. (°C/W)	Notes	Fax-on-Demand	Outline
Module											
										D-67 Half-Pak	
HFA90NH40	400	90		1.3	6	17	140	0.4	7	20468	J17
HFA90NH40R	400	90		1.3	6	17	140	0.48	7	20469	
HFA135NH40	400	135		1.3	9	14	120	0.27	7	20465	J17
HFA135NH40R	400	135		1.3	9	14	120	0.33	7	20455	
HFA180NH40	400	180		1.35	12	20	140	0.2	7	20452	
HFA180NH40R	400	180		1.35	12	20	140	0.24	7	20451	
HFA70NH60R	600	70		1.5	20	15	120	0.48	7	20456	
HFA70NH60	600	70		1.5	20	15	120	0.4	7	20457	
HFA105NH60	600	105		1.5	30	18	140	0.27	7	20444	
HFA105NH60R	600	105		1.5	30	18	140	0.33	7	20443	
HFA140NH60R	600	140		1.6	40	17	140	0.24	7	20446	
HFA140NH60	600	140		1.6	40	17	140	0.2	7	20447	
										D-60	
HFA75MB40C	400	75	90	1.3	3	11	100	0.5	4 7	20475	K15
HFA60MB60C	600	60	98	1.5	10	11	100	0.5	4 7	20462	
										D61-8	
HFA80NC40C	400	80		1.3	3	11	100	0.42	4 7	20473	K11
HFA70NC60C	600	70		1.5	10	11	110	0.42	4 7	20464	
										D61-8-SL	
HFA80NC40CSL	400	80	92	1.3	3	11	100	0.42	4 7	20472	K13
HFA70NC60CSL	600	70	94	1.5	10	11	110	0.42	4 7	20471	

2 Available with optional leadforms. Refer to case outline for details.
3 Available on tape-and-reel. Refer to case outline for details.
4 For center tap devices, the IF(AV) per leg is ½ that shown in the IF(AV) column.
5 All specifications given per leg, unless otherwise noted.
7 Reverse recovery characteristics @ IF = IF(AV) per leg: DIF/Dt=200A/µs, VR=200V

Module - Center Tap

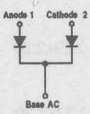
Part Number	V_{RRM} (V)	I_{FAV} @ T_C per pkg. (A)	(T_C)	V_{FM} @ I_{FM} (A)	IR @ V_{RWM} (μA)	Max I_{RRM} (A)	Max t_{rr} (mA)	$R_{\Theta JC}$ per pkg. (°C/W)	Notes	Fax-on-Demand	Outline
										D61-8-SM	
HFA80NC40CSM	400	80		1.3	3	11	100	0.42	4 7	20471	K12
HFA70NC60CSM	600	70		1.5	10	11	110	0.42	4 7	20459	
										TO-244AB Isolated	
HFA120MD40C	400	120	86	1.2	6	17	140	0.35	4 7	20466	K19
HFA160MD40C	400	160	85	1.2	9	15	110	0.28	4 7	20454	
HFA200MD40C	400	200	85	1.2	12	15	120	0.23	4 7	20450	
HFA100MD60C	600	100	91	1.4	20	15	115	0.35	4 7	20442	
HFA140MD60C	600	140	86	1.4	30	15	140	0.28	4 7		
HFA180MD60C	600	180	83	1.5	40	17	140	0.23	4 7		
										TO-244AB Non-Isolated	
HFA160NJ40C	400	160	98	1.3	6	17	140	0.2	4 7	20467	K18
HFA240NJ40C	400	240	97	1.3	9	14	120	0.14	4 7	20453	
HFA320NJ40C	400	320	98	1.35	12	20	140	0.1	4 7	20449	
HFA140NJ60C	600	140	100	1.5	20	15	120	0.2	4 7	20458	
HFA210NJ60C	600	210	100	1.5	30	18	140	0.14	4 7	20448	
HFA280NJ6C	600	280	100	1.6	40	17	140	0.1	4 7	20445	

2 Available with optional leadforms. Refer to case outline for details.
3 Available on tape-and-reel. Refer to case outline for details.
4 For center tap devices, the IF(AV) per leg is ½ that shown in the IF(AV) column.
5 All specifications given per leg, unless otherwise noted.
7 Reverse recovery characteristics @ IF = IF(AV) per leg: DIF/Dt=200A/μs, VR=200V

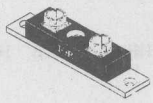
Part Number	V_{RRM} (V)	I_{FAV} @ T_C per pkg. (A)	(C)	V_{FM} @ I_{FM} (A)	IR @ V_{RWM} (μA)	Max I_{RRM} (A)	Max t_{rr} (mA)	$R_{\Theta JC}$ per pkg. (°C/W)	Notes	Fax-on-Demand	Outline
Module - Center Tap											
										TO-249AA Isolated	
HFA75MC40C	400	75	90	1.3	3	11	100	0.5	4 7	20474	K17
HFA60MC60C	600	60	98	1.5	10	11	100	0.5	4 7	20463	
										TO-249AA Non-Isolated	
HFA80NK40C	400	80	98	1.3	3	11	100	0.4	4 7	20470	K16
HFA70NK60C	600	70	100	1.5	10	11	110	0.4	4 7	20460	
										TO-244AB Isolated	
HFA120MD40D	400	120		1.2	6	17	140	0.35	4 7	20466	J18
HFA160MD40D	400	160		1.2	9	15	110	0.28	4 7	20454	
HFA200MD40D	400	200		1.2	12	15	120	0.23	4 7	20450	
HFA100MD60D	600	100		1.4	20	15	115	0.35	4 7	20442	
HFA140MD60D	600	140		1.4	30	15	140	0.28	4 7		
HFA180MD60D	600	180		1.5	40	17	140	0.23	4 7		

2 Available with optional leadforms. Refer to case outline for details.
3 Available on tape-and-reel. Refer to case outline for details.
4 For center tap devices, the IF(AV) per leg is ½ that shown in the IF(AV) column.
5 All specifications given per leg, unless otherwise noted.
7 Reverse recovery characteristics @ IF = IF(AV) per leg: DIF/Dt=200A/μs, VR=200V

Module - Doubler



TO-244AB Non-Isolated



Part Number	V_{RRM} (V)	I_{FAV} @ T_C per pkg. (A)	(C)	V_{FM} @ I_{FM} (A)	IR @ V_{RWM} (μA)	Max I_{RRM} (A)	Max t_{rr} (mA)	$R_{\Theta JC}$ per pkg. (°C/W)	Notes	Fax-on-Demand	Outline
HFA160NJ40D	400	160		1.3	6	17	140	0.24	4 7		J19
HFA240NJ40D	400	240		1.3	9	14	120	0.17	4 7		
HFA320NJ40D	400	320		1.35	12	20	140	0.12	4 7		
HFA140NJ60D	600	140		1.5	20	15	120	0.24	4 7		
HFA210NJ60D	600	210		1.5	30	18	140	0.17	4 7		
HFA280NJ60D	600	280		1.6	40	17	140	0.12	4 7		

2 Available with optional leadforms. Refer to case outline for details.
3 Available on tape-and-reel. Refer to case outline for details.
4 For center tap devices, the IF(AV) per leg is ½ that shown in the IF(AV) column.
5 All specifications given per leg, unless otherwise noted.
7 Reverse recovery characteristics @ IF = IF(AV) per leg: DIF/Dt=200A/μs, VR=200V

HEXFRED Die

International
IOR Rectifier

Wafer Part Number	Die Part Number	Die 'A x B' Length/Side (in.) mm	Bond Pad 'C x D' Length/Side (in.) mm	Anode metaliization (topside)	Tray quantity	Equivalent Finished Product(s)	
HF06A060ACB	N/A	(0.066x0.066) 1.68x1.68	(0.037x0.037) 0.94x0.94	Aluminum	N/A	HFA04TB60	HFA08TA60C
HF10A060ACB	HF10A060ACD	(0.090X0.090) 2.29x2.29	(0.062x0.062) 1.58x1.58	Aluminum	196	HFA08PB60	HFA16PA60C
						HFA16TA60C	HFA08TB60
HF20A060ACB	HF20A060ACD	(0.107x0.130) 2.72x3.30	(0.056x0.080) 1.42x2.03	Aluminum	100	n/a	
HF20C120ACB	HF20C120ACD	(0.107x0.130) 2.72x3.30	(0.056x0.080) 1.42x2.03	Aluminum	100	HFA06PB120	HFA06TB120
						HFA12PA120C	HFA12TA120C
HF30A060ACB	HF30A060ACD	(0.115x0.155) 2.92x3.94	(0.064x0.104) 1.63x2.64	Aluminum	100	HFA15PB60	HFA15TB60
						HFA30PA60C	HFA30TA60C
HF30C120ACB	HF30C120ACD	(0.115x0.155) 2.92x3.94	(0.064x0.104) 1.63x2.64	Aluminum	100	HFA08PB120	HFA08TB120
						HFA16PA120C	HFA16TA120C
HF40A060ACB	HF40A060ACD	(0.169x0.220) 4.29x5.59	(0.117x0.169) 2.97x4.29	Aluminum	35	HFA25PB60	HFA25TB60
						HFA50PA60C	
HF40C120ACB	HF40C120ACD	(0.169x0.220) 4.29x5.59	(0.117x0.169) 2.97x4.29	Aluminum	35	HFA16PB120	HFA16TB120
						HFA32PA120C	
HF50C120ACB	HF50C120ACD	(0.257x0.275)	(0.206x0.224)	Aluminum	25	HFA30PB120	

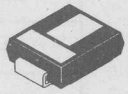
NOTES: 1. Wafer Part Number = Die in probed, un-cut wafer form.
2. Die Part Number = Die in probed, waffle pack form.

Part Number Coding Table

HF	HF=HEXFRED
10	die size
060	voltage X 10
A	A=Aluminum
CB	CB=probed, unsawn wafer CD=chip packed

UltraFast™ Recovery Diodes

International
IOR Rectifier

Part Number	V_{RRM} (V)	I_{FAV} (A)	@ T_C (C)	I_{FSM} @60 Hz (A)	V_{FM} @ $I_{(AV)}$ (V)	Max t_{rr} (nS)	$R_{\Theta JC}$ (°C/W)	Notes	Fax-on-Demand	Outline
									SMB 	
10BF10	100	1	120	30	0.95	35	25	3 6		J2
10BF20	200	1	120	30	0.95	35	25	3 6		
10BF40	400	1	75	30	1.3	50	30	3 6		
10BF60	600	1	75	30	1.5	100	30	3 6		
10BF80	800	1	75	30	1.7	100	30	3 6		
									SMC 	
30BF10	100	3	120	60	0.95	35	12	3 6		J3
30BF20	200	3	120	60	0.95	35	12	3 6		
30BF40	400	3	75	60	1.4	50	15	3 6		
30BF60	600	3	75	60	1.5	100	15	3 6		
30BF80	800	3	75	60	1.7	100	15	3 6		

2 Available with optional leadforms. Refer to case outline for details.
3 Available on tape-and-reel. Refer to case outline for details.
4 For center tap devices, the IF(AV) per leg is ½ that shown in the IF(AV) column.
5 All specifications given per leg, unless otherwise noted.
7 Reverse recovery characteristics @ IF = IF(AV) per leg: DIF/Dt=200A/µs, VR=200V

Fast Recovery Diodes in plastic packages: D-Pak, D² Pak, TO-220 and TO-247
Fast Series 600V, 60ns

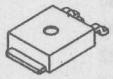
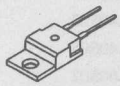
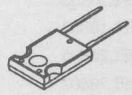
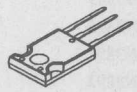
	8A	20A	20A	30A	40A	60A	80A
Voltage Grade	D-Pak	D^2-Pak	TO-220AC (2-pin)	TO-247 (3-pin)	TO-247 (2-pin)	TO-247 (2-pin)	TO-247 (3-pin)
200	8EWF02S	20ETF02S	20ETF02	30CPF02	40EPF02	60EPF02	80EPF02
400	8EWF04S	20ETF04S	20ETF04	30CPF04	40EPF04	60EPF04	80EPF04
600	8EWF06S	20ETF06S	20ETF06	30CPF06	40EPF06	60EPF06	80EPF06

Fast Recovery Diodes in plastic packages: D-Pak, D² Pak, TO-220 and TO-247
HV Fast Series 1200V, 110ns

	8A	20A	20A	40A	60A	80A
Voltage Grade	D-Pak	D^2-Pak	TO-220AC (2-pin)	TO-247 (2-pin)	TO-247 (2-pin)	TO-247 (3-pin)
1000	8EWF10S	20ETF10S	20ETF10	40EPF10	60EPF10	80EPF10
1200	8EWF02S	20ETF12S	20ETF12	40EPF12	60EPF12	80EPF12

Fast Recovery Diodes

International
IOR Rectifier

Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A)	(C)	I_{FSM} 50 Hz (A)	60Hz (A)	V_{FM} @ π X $I_{F(AV)}$ (V)	t_{rr} (nS)	$R_{\Theta JC}$ (°C/W)	Notes	Citrcuit	Fax-on-Demand	Outline
D-Pak 												
20ETF02S	200	20	97	250	260	1.3	160	0.9	1 1.2			H5
20ETF04S	400	20	97	250	260	1.3	160	0.9	1.2			
20ETF06S	600	20	97	250	260	1.3	160	0.9	1.2			
D²Pak 												
20ETF02	200	20	97	250	260	1.3	160	0.9	1 1.2			J4
20ETF04	400	20	97	250	260	1.3	160	0.9	1 1.2			
20ETF06	600	20	97	250	260	1.3	160	0.9	1.2			
TO-220AC 												
30EPF02	200	30	98	300	315	1.41	160	0.8	1.2			J10
30EPF04	400	30	98	300	315	1.41	160	0.8	1.2			
30EPF06	600	30	98	300	315	1.41	160	0.8	1.2			
TO-247 (Mod) 												
40EPF02	200	40	75	400	420	1.25	160	0.6	1.4			J12
40EPF04	400	40	75	400	420	1.25	160	0.6	1.4			
40EPF06	600	40	75	400	420	1.25	160	0.6	1.6			
60EPF02	200	60	115	700	730	1.3	160	0.35	1.6			
60EPF04	400	60	115	700	730	1.3	160	0.35	1.6			
60EPF06	600	60	115	700	730	1.3	160	0.35	1.6			
TO-247AC (TO-3P) 												
30CPF02	200	30	98	300	315	1.41	160	0.8	1.2	2 Anodes		J12A
30CPF04	400	30	98	300	315	1.41	160	0.8	1.2	2 Anodes		
30CPF06	600	30	98	300	315	1.41	160	0.8	1.2	2 Anodes		
80EPF02	200	80	115	800	850	1.2	160	0.32	1.8	2 Anodes		
80EPF04	400	80	115	800	850	1.2	160	0.32	1.8	2 Anodes		
80EPF06	600	80	115	800	850	1.2	160	0.32	1.8	2 Anodes		

1 Available on tape and reel. Refer to case outline.

1.2 IFM=20A, -di/dt=100A/µs

1.4 IFM=40A, -di/dt=100A/µs

1.6 IFM=60A, -di/dt=100A/µs

Fast Recovery Diodes

International
IOR Rectifier

Discrete

DO-203AA (DO-4)

Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A)	(C)	I_{FSM} 50 Hz (A)	60Hz (A)	V_{FM} @ π X $I_{F(AV)}$ (V)	t_{rr} (nS)	$R_{\Theta JC}$ (°C/W)	Notes	Fax-on-Demand	Outline
1N3879	50	6	100	72	75	1.40	300	2.5	2 5 3 4	20030	R6
1N3880	100	6	100	72	75	1.40	300	2.5	2 5 3 4	20030	
1N3881	200	6	100	72	75	1.40	300	2.5	2 5 3 4	20030	
1N3882	300	6	100	72	75	1.40	300	2.5	2 5 3 4	20030	
1N3883	400	6	100	72	75	1.40	300	2.5	2 5 3 4	20030	
6FL10S02	100	6	100	110	115	1.40	200	2.50	2 5 3 4	20030	
6FL10S05	100	6	100	110	115	1.40	500	2.50	2 5 3 4	20030	
6FL20S02	200	6	100	110	115	1.40	200	2.50	2 5 3 4	20030	
6FL20S05	200	6	100	110	115	1.40	500	2.50	2 5 3 4	20030	
6FL40S02	400	6	100	110	115	1.40	200	2.50	2 5 3 4	20030	
6FL40S05	400	6	100	110	115	1.40	500	2.50	2 5 3 4	20030	
6FL60S02	600	6	100	110	115	1.40	200	2.50	2 5 3 4	20030	
6FL60S05	600	6	100	110	115	1.40	500	2.50	2 5 3 4	20030	
6FL80S05	800	6	100	110	115	1.40	500	2.50	2 5 3 4	20030	
6FL100S05	1000	6	100	110	115	1.40	500	2.50	2 5 3 4	20030	
12FL10S05	100	12	100	145	150	1.40	500	2.0	2 5 3 4	20030	
12FL10S02	100	12	100	145	150	1.40	200	2.0	2 5 3 4	20030	
12FL20S05	200	12	100	145	150	1.40	500	2.0	2 5 3 4	20030	
12FL20S02	200	12	100	145	150	1.40	200	2.0	2 5 3 4	20030	
12FL40S02	400	12	100	145	150	1.40	200	2.0	2 5 3 4	20030	
12FL40S05	400	12	100	145	150	1.40	500	2.0	2 5 3 4	20030	
12FL60S02	600	12	100	145	150	1.40	200	2.0	2 5 3 4	20030	
12FL60S05	600	12	100	145	150	1.40	500	2.0	2 5 3 4	20030	
12FL80S05	800	12	100	145	150	1.40	500	2.0	2 5 3 4	20030	
12FL100S05	1000	12	100	145	150	1.40	500	2.0	2 5 3 4	20030	
1N3889	50	12	100	145	150	1.40	300	2.0	2 5 3 4	20030	
1N3890	100	12	100	145	150	1.40	300	2.0	2 5 3 4	20030	
1N3891	200	12	100	145	150	1.40	300	2.0	2 5 3 4	20030	
1N3892	300	12	100	145	150	1.40	300	2.0	2 5 3 4	20030	
1N3893	400	12	100	145	150	1.40	300	2.0	2 5 3 4	20030	
16FL10S05	100	16	100	180	190	1.40	500	1.6	2 5 3 4	20030	
16FL10S02	100	16	100	180	190	1.40	200	1.6	2 5 3 4	20030	
16FL20S05	200	16	100	180	190	1.40	500	1.6	2 5 3 4	20030	

2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=125°C
3 trr conditions: Tj = 25°C, IFM = pi X rated IF(AV), diF/dt = 25 A/µs.
4 VFM measured at Tj= 25°C
5 Cathode to stud. To order anode to stud, add 'R' to part number (e.g. IRD3899R,40HFLR10502)
6 Available with metric stud. To order, add M to part number (e.g. 40FL10S02M)
7 VFM conditions: IFM = 30Apk, Tj=25°C
8 VFM conditions: IFM = 60Apk, Tj=25°C
9 IF(AV) conditions: 180°C conduction, half sine
10 Tj = 25°C, IF=1A, -di/dt = 100A/µs, VR=30V
11 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
12 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (e.g. SD103R04S1C
13 Available with metric stud. To order, change P to M in part number (e.g. SD103N04S10MV)
14 Available with flag lead. To order, add B to part number, e.g. (e.g. SD103N04S10PBV)
15 For trr: Tj=25°C

Fast Recovery Diodes

International
IOR Rectifier

Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A)	(C)	I_{FSM} 50 Hz (A)	60Hz (A)	V_{FM} @ π X $I_{F(AV)}$ (V)	t_{rr} (nS)	$R_{\Theta JC}$ (°C/W)	Notes	Fax-on-Demand	Outline
16FL20S02	200	16	100	180	190	1.40	200	1.6	2 5 3 4	20030	R6
16FL40S02	400	16	100	180	190	1.40	200	1.6	2 5 3 4	20030	
16FL40S05	400	16	100	180	190	1.40	500	1.6	2 5 3 4	20030	
16FL60S05	600	16	100	180	190	1.40	500	1.6	2 5 3 4	20030	
16FL60S02	600	16	100	180	190	1.40	200	1.6	2 5 3 4	20030	
16FL80S05	800	16	100	180	190	1.40	500	1.6	2 5 3 4	20030	
16FL100S05	1000	16	100	180	190	1.40	500	1.6	2 5 3 4	20030	
									DO-203AB (DO-5) 		
IRD3899	50	20	100	240	250	1.65	350	0.60	2 3 4 5 6	20092	R7
IRD3900	100	20	100	240	250	1.65	350	0.60	2 3 4 5 6	20092	
IRD3901	200	20	100	240	250	1.65	350	0.60	2 3 4 5 6	20092	
IRD3902	300	20	100	240	250	1.65	350	0.60	2 3 4 5 6	20092	
IRD3903	400	20	100	240	250	1.65	350	0.60	2 3 4 5 6	20092	
30HFU-100	100	30	91	400	420	1.45	60	0.6	2 3 5 6 7 9 10	82021	
30HFU-200	200	30	91	400	420	1.45	60	0.6	2 3 5 6 7 9 10	82021	
30HFU-300	300	30	91	400	420	1.45	60	0.6	2 3 5 6 7 9 10	82021	
30HFU-400	400	30	91	400	420	1.45	60	0.6	2 3 5 6 7 9 10	82021	
30HFU-500	500	30	91	400	420	1.45	60	0.6	2 3 5 6 7 9 10	82021	
30HFU-600	600	30	91	400	420	1.45	60	0.6	2 3 5 6 7 9 10	82021	
IRD3909	50	30	100	285	300	1.80	350	0.46	2 3 4 5 6	20092	
IRD3910	100	30	100	285	300	1.80	350	0.46	2 3 4 5 6	20092	
IRD3911	200	30	100	285	300	1.80	350	0.46	2 3 4 5 6	20092	
IRD3912	300	30	100	285	300	1.80	350	0.46	2 3 4 5 6	20092	
IRD3913	400	30	100	285	300	1.80	350	0.46	2 3 4 5 6	20092	
40HFL10S02	100	40	75	400	420	1.95	200	0.6	2 3 4 5 6	20093	
40HFL10S05	100	40	75	400	420	1.95	500	0.6	2 3 4 5 6	20093	
40HFL20S05	200	40	75	400	420	1.95	500	0.6	2 3 4 5 6	20093	
40HFL20S02	200	40	75	400	420	1.95	200	0.6	2 3 4 5 6	20093	
40HFL40S05	400	40	75	400	420	1.95	500	0.6	2 3 4 5 6	20093	
40HFL40S02	400	40	75	400	420	1.95	200	0.6	2 3 4 5 6	20093	
40HFL60S05	600	40	75	400	420	1.95	500	0.6	2 3 4 5 6	20093	
40HFL60S02	600	40	75	400	420	1.95	200	0.6	2 3 4 5 6	20093	
40HFL80S05	800	40	75	400	420	1.95	500	0.6	2 3 4 5 6	20093	
40HFL100S05	1000	40	75	400	420	1.95	500	0.6	2 3 4 5 6	20093	
60HFU-100	100	60	82	700	730	1.50	60	0.36	2 3 5 6 8 9 10	80061	

2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=125°C
3 trr conditions: Tj = 25°C, IFM = pi X rated IF(AV), diF/dt = 25 A/µs.
4 VFM measured at Tj= 25°C
5 Cathode to stud. To order anode to stud, add 'R' to part number (e.g. IRD3899R,40HFLR10502)
6 Available with metric stud. To order, add M to part number (e.g. 40FL10S02M)
7 VFM conditions: IFM = 30Apk, Tj=25°C
8 VFM conditions: IFM = 60Apk, Tj=25°C
9 IF(AV) conditions: 180°C conduction, half sine
10 Tj = 25°C, IF=1A, -di/dt = 100A/µs, VR=30V
11 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
12 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (e.g. SD103R04S1C
13 Available with metric stud. To order, change P to M in part number (e.g. SD103N04S10MV)
14 Available with flag lead. To order, add B to part number, e.g. (e.g. SD103N04S10PBV)
15 For trr: Tj=25°C

Fast Recovery Diodes

International
IOR Rectifier

Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A)	(T_C)	I_{FSM} 50 Hz (A)	I_{FSM} 60Hz (A)	V_{FM} @ π X $I_{F(AV)}$ (V)	t_{rr} (nS)	$R_{\Theta JC}$ (°C/W)	Notes	Fax-on-Demand	Outline
60HFU-200	200	60	82	700	730	1.50	60	0.36	2 3 5 6 8 9 10	80061	R7
60HFU-300	300	60	82	700	730	1.50	60	0.36	2 3 5 6 8 9 10	80061	
60HFU-400	400	60	82	700	730	1.50	60	0.36	2 3 5 6 8 9 10	80061	
60HFU-500	500	60	82	700	730	1.50	60	0.36	2 3 5 6 8 9 10	80061	
60HFU-600	600	60	82	700	730	1.50	60	0.36	2 3 5 6 8 9 10	80061	
70HFL10S05	100	70	75	700	730	1.85	500	0.36	2 3 5 6 6	20093	
70HFL10S02	100	70	75	700	730	1.85	200	0.36	2 3 5 6 6	20093	
70HFL20S05	200	70	75	700	730	1.85	500	0.36	2 3 5 6 6	20093	
70HFL20S02	200	70	75	700	730	1.85	200	0.36	2 3 5 6 6	20093	
70HFL40S02	400	70	75	700	730	1.85	200	0.36	2 3 5 6 6	20093	
70HFL40S05	400	70	75	700	730	1.85	500	0.36	2 3 5 6 6	20093	
70HFL60S05	600	70	75	700	730	1.85	500	0.36	2 3 5 6 6	20093	
70HFL60S02	600	70	75	700	730	1.85	200	0.36	2 3 5 6 6	20093	
70HFL80S05	800	70	75	700	730	1.85	500	0.36	2 3 5 6 6	20093	
70HFL100S05	1000	70	75	700	730	1.85	500	0.36	2 3 5 6 6	20093	
85HFL10S02	100	85	75	1100	1150	1.75	200	0.30	2 3 4 5 6	20093	
85HFL10S05	100	85	75	1100	1150	1.75	500	0.30	2 3 4 5 6	20093	
85HFL20S02	200	85	75	1100	1150	1.75	200	0.30	2 3 4 5 6	20093	
85HFL20S05	200	85	75	1100	1150	1.75	500	0.30	2 3 4 5 6	20093	
85HFL40S05	400	85	75	1100	1150	1.75	500	0.30	2 3 4 5 6	20093	
85HFL40S02	400	85	75	1100	1150	1.75	200	0.30	2 3 4 5 6	20093	
85HFL60S05	600	85	75	1100	1150	1.75	500	0.30	2 3 4 5 6	20093	
85HFL60S02	600	85	75	1100	1150	1.75	200	0.30	2 3 4 5 6	20093	
85HFL80S05	800	85	75	1100	1150	1.75	500	0.30	2 3 4 5 6	20093	
85HFL100S05	1000	85	75	1100	1150	1.75	500	0.36	2 3 4 5 6	20093	
									DO-205AC (DO-30)		
SD103N04S10PV	400	110	85	3000	3140	2.23	1000	0.16	2 4 12 13 14 15	82062	R11
SD103N08S10PV	800	110	85	3000	3140	2.23	1000	0.16	2 4 12 13 14 15	82062	
SD103N10S10PV	1000	110	85	3000	3140	2.23	1000	0.16	2 4 12 13 14 15	82062	
SD103N12S15PV	1200	110	85	3000	3140	2.23	1500	0.16	2 4 12 13 14 15	82062	
SD103N14S15PV	1400	110	85	3000	3140	2.23	1500	0.16	2 4 12 13 14 15	82062	
SD103N16S15PV	1600	110	85	3000	3140	2.23	1500	0.16	2 4 12 13 14 15	82062	
SD103N20S20PC	2000	110	85	3000	3140	2.23	2000	0.16	2 4 12 13 14 15	82062	R12
SD103N25S20PC	2500	110	85	3000	3140	2.23	2000	0.16	2 4 12 13 14 15	82062	
SD153N04S10PV	400	150	85	3600	3770	1.55	1000	0.16	2 4 12 13 14 15	82063	R11

2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=125°C
3 trr conditions: Tj = 25°C, IFM = pi X rated IF(AV), diF/dt = 25 A/µs.
4 VFM measured at Tj= 25°C
5 Cathode to stud. To order anode to stud, add 'R' to part number (e.g. IRD3899R,40HFLR10502)
6 Available with metric stud. To order, add M to part number (e.g. 40FL10S02M)
7 VFM conditions: IFM = 30Apk, Tj=25°C
8 VFM conditions: IFM = 60Apk, Tj=25°C
9 IF(AV) conditions: 180°C conduction, half sine
10 Tj = 25°C, IF=1A, -di/dt = 100A/µs, VR=30V
11 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
12 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (e.g. SD103R04S1C
13 Available with metric stud. To order, change P to M in part number (e.g. SD103N04S10MV)
14 Available with flag lead. To order, add B to part number, e.g. (e.g. SD103N04S10PBV)
15 For trr: Tj=25°C

Fast Recovery Diodes

International
IOR Rectifier

Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A)	(C)	I_{FSM} 50 Hz (A)	60Hz (A)	V_{FM} @ π X $I_{F(AV)}$ (V)	t_{rr} (nS)	$R_{\Theta JC}$ (°C/W)	Notes	Fax-on-Demand	Outline
SD153N08S10PV	800	150	85	3600	3770	1.55	1000	0.16	2 4 12 13 14 15	82063	R11
SD153N10S10PV	1000	150	85	3600	3770	1.55	1000	0.16	2 4 12 13 14 15	82063	
SD153N12S15PV	1200	150	85	3600	3770	1.55	1500	0.16	2 4 12 13 14 15	82063	
SD153N14S15PV	1400	150	85	3600	3770	1.55	1500	0.16	2 4 12 13 14 15	82063	
SD153N16S15PV	1600	150	85	3600	3770	1.55	1500	0.16	2 4 12 13 14 15	82063	
									DO-205AB (DO-9)		
SD203N04S10PV	400	200	85	4200	4400	1.65	1000	0.115	2 4 12 13 14 15	82064	R24
SD203N08S10PV	800	200	85	4200	4400	1.65	1000	0.115	2 4 12 13 14 15	82064	
SD203N10S10PV	1000	200	85	4200	4400	1.65	1000	0.115	2 4 12 13 14 15	82064	
SD203N12S15PV	1200	200	85	4200	4400	1.65	1500	0.115	2 4 12 13 14 15	82064	
SD203N14S15PV	1400	200	85	4200	4400	1.65	1500	0.115	2 4 12 13 14 15	82064	
SD203N16S15PV	1600	200	85	4200	4400	1.65	1500	0.115	2 4 12 13 14 15	82064	
SD203N20S20PC	2000	200	85	4200	4400	1.65	2000	0.115	2 4 12 13 14 15	82064	R23
SD203N25S20PC	2500	200	85	4200	4400	1.65	2000	0.115	2 4 12 13 14 15	82064	
251UL80S10	800	250	70	3350	3500	1.78	1000	0.15	2 4 5 15 16	20491	R22
251UL100S10	1000	250	70	3350	3500	1.78	1000	0.15	2 4 5 15 16	20491	
251UL120S15	1200	250	70	3350	3500	1.78	1500	0.15	2 4 5 15 16	20491	
251UL140S15	1400	250	70	3350	3500	1.78	1500	0.15	2 4 5 15 16	20491	
251UL160S15	1600	250	70	3350	3500	1.78	1500	0.15	2 4 5 15 16	20491	
251UL180S20	1800	250	70	3350	3500	1.78	2000	0.15	2 4 5 16	20491	
251UL200S20	2000	250	70	3350	3500	1.78	2000	0.15	2 4 5 16	20491	
251UL250S20	2500	250	70	3350	3500	1.78	2000	0.15	2 4 5 16	20491	
SD253N04S15PV	400	250	85	4500	4710	1.38	1500	0.115	2 4 12 13 14 15	82065	R24
SD253N08S15PV	800	250	85	4500	4710	1.38	1500	0.115	2 4 12 13 14 15	82065	
SD253N10S15PV	1000	250	85	4500	4710	1.38	1500	0.115	2 4 12 13 14 15	82065	
SD253N12S20PV	1200	250	85	4500	4710	1.38	2000	0.115	2 4 12 13 14 15	82065	
SD253N14S20PV	1400	250	85	4500	4710	1.38	2000	0.115	2 4 12 13 14 15	82065	
SD253N16S20PV	1600	250	85	4500	4710	1.38	2000	0.115	2 4 12 13 14 15	82065	
									B-8		
SD233N30S50PC	3000	235	60	4630	4840	3.20	5000	0.10	2 4 12 13 14 15		R25
SD233N36S50PC	3600	235	60	4630	4840	3.20	5000	0.10	2 4 12 13 14 15		

2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=125°C
3 trr conditions: Tj = 25°C, IFM = pi X rated IF(AV), diF/dt = 25 A/µs.
4 VFM measured at Tj= 25°C
5 Cathode to stud. To order anode to stud, add 'R' to part number (e.g. IRD3899R,40HFLR10502)
6 Available with metric stud. To order, add M to part number (e.g. 40FL10S02M)
7 VFM conditions: IFM = 30Apk, Tj=25°C
8 VFM conditions: IFM = 60Apk, Tj=25°C
9 IF(AV) conditions: 180°C conduction, half sine
10 Tj = 25°C, IF=1A, -di/dt = 100A/µs, VR=30V
11 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
12 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (e.g. SD103R04S1C
13 Available with metric stud. To order, change P to M in part number (e.g. SD103N04S10MV)
14 Available with flag lead. To order, add B to part number, e.g. (e.g. SD103N04S10PBV)
15 For trr: Tj=25°C

Fast Recovery Diodes

International
IOR Rectifier

Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A)	(C)	I_{FSM} 50 Hz (A)	I_{FSM} 60Hz (A)	V_{FM}@ π X $I_{F(AV)}$ (V)	t_{rr} (nS)	$R_{\Theta JC}$ (°C/W)	Notes	Fax-on-Demand	Outline
SD233N40S50PC	4000	235	60	4630	4840	3.20	5000	0.10	2 4 12 13 14 15		R25
SD233N45S50PC	4500	235	60	4630	4840	3.20	5000	0.10	2 4 12 13 14 15		
SD453N12S20PC	1200	400	70	7820	8190	2.20	2000	0.10	2 4 12 13 15	82076	
SD453N16S20PC	1600	400	70	7820	8190	2.20	2000	0.10	2 4 12 13 15	82076	
SD453N20S20PC	2000	400	70	7820	8190	2.20	2000	0.10	2 4 12 13 15	82076	
SD453N25S20PC	2500	400	70	7820	8190	2.20	2000	0.10	2 4 12 13 15	82076	
SD453N12S30PC	1200	450	70	8070	8450	1.85	3000	0.10	2 4 12 13 15	82076	
SD453N16S30PC	1600	450	70	8070	8450	1.85	3000	0.10	2 4 12 13 15	82076	
SD453N20S30PC	2000	450	70	8070	8450	1.85	3000	0.10	2 4 12 13 15	82076	
SD453N25S30PC	2500	450	70	8070	8450	1.85	3000	0.10	2 4 12 13 15	82076	
									DO-200AA (A-Puk)		
SD303C04S10C	400	350	55	4850	5080	2.26	1000	0.08	4 11 12	82066	R26
SD303C08S10C	800	350	55	4850	5080	2.26	1000	0.08	4 11 12	82066	
SD303C10S10C	1000	350	55	4850	5080	2.26	1000	0.08	4 11 12	82066	
SD303C12S15C	1200	350	55	4850	5080	2.26	1500	0.08	4 11 12	82066	
SD303C14S15C	1400	350	55	4850	5080	2.26	1500	0.08	4 11 12	82066	
SD303C16S15C	1600	350	55	4850	5080	2.26	1500	0.08	4 11 12	82066	
SD303C20S20C	2000	350	55	4850	5080	2.26	2000	0.08	4 11 12	82066	
SD303C25S20C	2500	350	55	4850	5080	2.26	2000	0.08	4 11 12	82066	
SD403C04S10C	400	430	55	5200	5445	1.83	1000	0.08	4 11 12	82067	
SD403C08S10C	800	430	55	5200	5445	1.83	1000	0.08	4 11 12	82067	
SD403C10S10C	1000	430	55	5200	5445	1.83	1000	0.08	4 11 12	82067	
SD403C12S15C	1200	430	55	5200	5445	1.83	1500	0.08	4 11 12	82067	
SD403C14S15C	1400	430	55	5200	5445	1.83	1500	0.08	4 11 12	82067	
SD403C16S15C	1600	430	55	5200	5445	1.83	1500	0.08	4 11 12	82067	
									B-43 (E-Puk)		
SD603C04S10C	400	600	55	7000	7330	2.97	1000	0.038	4 11 12	82068	R27
SD603C08S10C	800	600	55	7000	7330	2.97	1000	0.038	4 11 12	82068	
SD603C10S10C	1000	600	55	7000	7330	2.97	1000	0.038	4 11 12	82068	
SD603C12S15C	1200	600	55	7000	7330	2.97	1500	0.038	4 11 12	82068	
SD603C14S15C	1400	600	55	7000	7330	2.97	1500	0.038	4 11 12	82068	

2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=125°C
3 trr conditions: Tj = 25°C, IFM = pi X rated IF(AV), diF/dt = 25 A/µs.
4 VFM measured at Tj= 25°C
5 Cathode to stud. To order anode to stud, add 'R' to part number (e.g. IRD3899R,40HFLR10502)
6 Available with metric stud. To order, add M to part number (e.g. 40FL10S02M)
7 VFM conditions: IFM = 30Apk, Tj=25°C
8 VFM conditions: IFM = 60Apk, Tj=25°C
9 IF(AV) conditions: 180°C conduction, half sine
10 Tj = 25°C, IF=1A, -di/dt = 100A/µs, VR=30V
11 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
12 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (e.g. SD103R04S1C
13 Available with metric stud. To order, change P to M in part number (e.g. SD103N04S10MV)
14 Available with flag lead. To order, add B to part number, e.g. (e.g. SD103N04S10PBV)
15 For trr: Tj=25°C

Fast Recovery Diodes

International
IOR Rectifier

Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A)	(T_C)	I_{FSM} 50 Hz (A)	I_{FSM} 60Hz (A)	V_{FM}@ π X $I_{F(AV)}$ (V)	t_{rr} (nS)	$R_{\Theta JC}$ (°C/W)	Notes	Fax-on-Demand	Outline
SD603C16S15C	1600	600	55	7000	7330	2.97	1500	0.038	4 11 12	82068	R27
SD603C20S20C	2000	600	55	7000	7330	2.97	2000	0.038	4 11 12	82068	
SD603C22S20C	2200	600	55	7000	7330	2.97	2000	0.038	4 11 12	82068	
SD823C12S20C	1200	810	55	7820	8190	2.20	2000	0.038	11 15 19	82074	
SD823C16S20C	1600	810	55	7820	8190	2.20	2000	0.038	11 15 19	82074	
SD823C20S20C	2000	810	55	7820	8190	2.20	2000	0.038	11 15 19	82074	
SD823C25S20C	2500	810	55	7820	8190	2.20	2000	0.038	11 15 19	82074	
SD803C04S10C	400	845	55	9500	9945	1.89	1000	0.038	4 11 12	82069	
SD803C08S10C	800	845	55	9500	9945	1.89	1000	0.038	4 11 12	82069	
SD803C10S10C	1000	845	55	9500	9945	1.89	1000	0.038	4 11 12	82069	
SD803C12S15C	1200	845	55	9500	9945	1.89	1500	0.038	4 11 12	82069	
SD803C14S15C	1400	845	55	9500	9945	1.89	1500	0.038	4 11 12	82069	
SD803C16S15C	1600	845	55	9500	9945	1.89	1500	0.038	4 11 12	82069	
SD823C12S30C	1200	910	55	8070	8450	1.85	3000	0.038	11 15 19	82074	
SD823C16S30C	1600	910	55	8070	8450	1.85	3000	0.038	11 15 19	82074	
SD823C20S30C	2000	910	55	8070	8450	1.85	3000	0.038	11 15 19	82074	
SD823C25S30C	2500	910	55	8070	8450	1.85	3000	0.038	11 15 19	82074	
									DO-200AB (B-Puk)		
SD263C30S50L	3000	375	55	4630	4850	3.20	5000	0.05	11 15 18 19	80071	R28
SD263C36S50L	3600	375	55	4630	4850	3.20	5000	0.05	11 15 18 19	80071	
SD263C40S50L	4000	375	55	4630	4850	3.20	5000	0.05	11 15 18 19	80071	
SD263C45S50L	4500	375	55	4630	4850	3.20	5000	0.05	11 15 18 19	80071	
SD553C30S50L	3000	560	55	10100	10570	3.24	5000	0.031	11 15 18 19	82092	
SD553C36S50L	3600	560	55	10100	10570	3.24	5000	0.031	11 15 18 19	82092	
SD553C40S50L	4000	560	55	10100	10570	3.24	5000	0.031	11 15 18 19	82092	
SD553C45S50L	4500	560	55	10100	10570	3.24	5000	0.031	11 15 18 19	82092	
SD703C12S20L	1200	700	55	7820	8190	2.20	2000	0.046	11 15 19	82075	
SD703C16S20L	1600	700	55	7820	8190	2.20	2000	0.046	11 15 19	82075	
SD703C20S20L	2000	700	55	7820	8190	2.20	2000	0.046	11 15 19	82075	
SD703C25S20L	2500	700	55	7820	8190	2.20	2000	0.046	11 15 19	82075	
SD703C12S30L	1200	790	55	8070	8450	1.85	3000	0.046	11 15 19	82075	
SD703C16S30L	1600	790	55	8070	8450	1.85	3000	0.046	11 15 19	82075	
SD703C20S30L	2000	790	55	8070	8450	1.85	3000	0.046	11 15 19	82075	
SD703C25S30L	2500	790	55	8070	8450	1.85	3000	0.046	11 15 19	82075	
SD1053C18S30L	1800	920	55	10930	11450	2.26	3000	0.031	3 5	82079	

2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=125°C
3 trr conditions: Tj = 25°C, IFM = pi X rated IF(AV), diF/dt = 25 A/µs.
4 VFM measured at Tj= 25°C
5 Cathode to stud. To order anode to stud, add 'R' to part number (e.g. IRD3899R,40HFLR10502)
6 Available with metric stud. To order, add M to part number (e.g. 40FL10S02M)
7 VFM conditions: IFM = 30Apk, Tj=25°C
8 VFM conditions: IFM = 60Apk, Tj=25°C
9 IF(AV) conditions: 180°C conduction, half sine
10 Tj = 25°C, IF=1A, -di/dt = 100A/µs, VR=30V
11 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
12 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (e.g. SD103R04S1C
13 Available with metric stud. To order, change P to M in part number (e.g. SD103N04S10MV)
14 Available with flag lead. To order, add B to part number, e.g. (e.g. SD103N04S10PBV)
15 For trr: Tj=25°C

Fast Recovery Diodes

International
IOR Rectifier

Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A)	(C)	I_{FSM} 50 Hz (A)	I_{FSM} 60Hz (A)	V_{FM} @ π X $I_{F(AV)}$ (V)	t_{rr} (nS)	$R_{\Theta JC}$ (°C/W)	Notes	Fax-on-Demand	Outline
SD1053C22S30L	2200	920	55	10930	11450	2.26	3000	0.031	3 5	82079	R28
SD1053C25S30L	2500	920	55	10930	11450	2.26	3000	0.031	3 5	82079	
SD1053C28S30L	2800	920	55	10930	11450	2.26	3000	0.031	3 5	82079	
SD1053C30S30L	3000	920	55	10930	11450	2.26	3000	0.031	3 5	82079	
SD1053C18S20L	1800	1050	55	12620	13210	1.90	2000	0.031	3 5	82079	
SD1053C22S20L	2200	1050	55	12620	13210	1.90	2000	0.031	3 5	82079	
SD1053C25S20L	2500	1050	55	12620	13210	1.90	2000	0.031	3 5	82079	
									DO-200AC (K-Puk)		
SD853C30S50K	3000	990	55	16000	16750	2.90	5000	0.02	11 15 18 19	82093	R29
SD853C36S50K	3600	990	55	16000	16750	2.90	5000	0.02	11 15 18 19	82093	
SD853C40S50K	4000	990	55	16000	16750	2.90	5000	0.02	11 15 18 19	82093	
SD853C45S50K	4500	990	55	16000	16750	2.90	5000	0.02	11 15 18 19	82093	
SD1553C18S30K	1800	1650	55	18500	19370	2.60	3000	0.02	11 15 19	82091	
SD1553C22S30K	2200	1650	55	18500	19370	2.60	3000	0.02	11 15 19	82091	
SD1553C25S30K	2500	1650	55	18500	19370	2.60	3000	0.02	11 15 19	82091	
SD1553C28S30K	2800	1650	55	18500	19370	2.60	3000	0.02	11 15 19	82091	
SD1553C30S30K	3000	1650	55	18500	19370	2.60	3000	0.02	11 15 19	82091	
SD1553C18S20K	1800	1825	55	21030	22010	2.23	2000	0.02	11 15 19	82091	
SD1553C22S20K	2200	1825	55	21030	22010	2.23	2000	0.02	11 15 19	82091	
SD1553C25S20K	2500	1825	55	21030	22010	2.23	2000	0.02	11 15 19	82091	
									B-44 (R-Puk)		
SD2053C32S50R	3200	2000	55	25600	27100	3.50	5000	0.01	11 15 19		R30
SD2053C36S50R	3600	2000	55	25600	27100	3.50	5000	0.01	11 15 19		
SD2053C40S50R	4000	2000	55	25600	27100	3.50	5000	0.01	11 15 19		
SD2053C45S50R	4500	2000	55	25600	27100	3.50	5000	0.01	11 15 19		
SD3553C16S50R	1600	3500	55	40200	42600	2.04	2000	0.01	11 15 19		
SD3553C20S50R	2000	3500	55	40200	42600	2.04	2000	0.01	11 15 19		
SD3553C25S50R	2500	3500	55	40200	42600	2.04	2000	0.01	11 15 19		

2 For Ifsm: 100% VRRM reapplied, Tj=Tj max.=125°C
3 trr conditions: Tj = 25°C, IFM = pi X rated IF(AV), diF/dt = 25 A/µs.
4 VFM measured at Tj= 25°C
5 Cathode to stud. To order anode to stud, add 'R' to part number (e.g. IRD3899R,40HFLR10502)
6 Available with metric stud. To order, add M to part number (e.g. 40FL10S02M)
7 VFM conditions: IFM = 30Apk, Tj=25°C
8 VFM conditions: IFM = 60Apk, Tj=25°C
9 IF(AV) conditions: 180°C conduction, half sine
10 Tj = 25°C, IF=1A, -di/dt = 100A/µs, VR=30V
11 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
12 Cathode to stud. To order anode to stud, change 'N' to 'R' in part number (e.g. SD103R04S1C
13 Available with metric stud. To order, change P to M in part number (e.g. SD103N04S10MV)
14 Available with flag lead. To order, add B to part number, e.g. (e.g. SD103N04S10PBV)
15 For trr: Tj=25°C

Fast Power Modules

International
IOR Rectifier

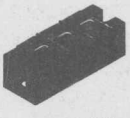
Diode

T-Module

Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A) (C)	I_{FSM} 50 Hz (A)	I_{FSM} 60Hz (A)	V_{FM} (V)	t_{rr} (nS)	$R_{\Theta JC}$ DC (K/W)	Notes	Fax-on-Demand	Outline
T40HFL10S05	100	40 70	400	420	1.6	500 (110)	0.85	3 10 11 17 22		M3
T40HFL10S02	100	40 70	400	420	1.6	200 (70)	0.85	3 10 11 17 22		
T40HFL20S02	200	40 70	400	420	1.6	200 (70)	0.85	3 10 11 17 22		
T40HFL20S05	200	40 70	400	420	1.6	500 (110)	0.85	3 10 11 17 22		
T40HFL40S02	400	40 70	400	420	1.6	200 (70)	0.85	3 10 11 17 22		
T40HFL40S05	400	40 70	400	420	1.6	500 (110)	0.85	3 10 11 17 22		
T40HFL60S02	600	40 70	400	420	1.6	200 (70)	0.85	3 10 11 17 22		
T40HFL60S05	600	40 70	400	420	1.6	500 (110)	0.85	3 10 11 17 22		
T40HFL80S05	800	40 70	400	420	1.6	500 (110)	0.85	3 10 11 17 22		
T40HFL100S05	1000	40 70	400	420	1.6	500 (110)	0.85	3 10 11 17 22		
T70HFL10S05	100	70 70	700	730	1.73	500 (110)	0.53	3 10 11 17 22		
T70HFL10S02	100	70 70	700	730	1.73	200 (70)	0.53	3 10 11 17 22		
T70HFL20S02	200	70 70	700	730	1.73	200 (70)	0.53	3 10 11 17 22		
T70HFL20S05	200	70 70	700	730	1.73	500 (110)	0.53	3 10 11 17 22		
T70HFL40S05	400	70 70	700	730	1.73	500 (110)	0.53	3 10 11 17 22		
T70HFL40S02	400	70 70	700	730	1.73	200 (70)	0.53	3 10 11 17 22		
T70HFL60S05	600	70 70	700	730	1.73	500 (110)	0.53	3 10 11 17 22		
T70HFL60S02	600	70 70	700	730	1.73	200 (70)	0.53	3 10 11 17 22		
T70HFL80S05	800	70 70	700	730	1.73	500 (110)	0.53	3 10 11 17 22		
T70HFL100S05	1000	70 70	700	730	1.73	500 (110)	0.53	3 10 11 17 22		
T85HFL10S02	100	85 70	1100	1150	1.55	200 (80)	0.46	3 10 11 17 22		
T85HFL10S05	100	85 70	1100	1150	1.55	500 (120)	0.46	3 10 11 17 22		
T85HFL20S05	200	85 70	1100	1150	1.55	500 (120)	0.46	3 10 11 17 22		
T85HFL20S02	200	85 70	1100	1150	1.55	200 (80)	0.46	3 10 11 17 22		
T85HFL40S05	400	85 70	1100	1150	1.55	500 (120)	0.46	3 10 11 17 22		
T85HFL40S02	400	85 70	1100	1150	1.55	200 (80)	0.46	3 10 11 17 22		
T85HFL60S05	600	85 70	1100	1150	1.55	500 (120)	0.46	3 10 11 17 22		
T85HFL60S02	600	85 70	1100	1150	1.55	200 (80)	0.46	3 10 11 17 22		
T85HFL80S05	800	85 70	1100	1150	1.55	500 (120)	0.46	3 10 11 17 22		
T85HFL100S05	1000	85 70	1100	1150	1.55	500 (120)	0.46	3 10 11 17 22		

Diode

INT-A-Pak



IRKEL132-06S10	600	140 100	2500	2600	1.68	1000	0.20	11 20 21 23 24 25		M5
IRKEL132-10S10	1000	140 100	2500	2600	1.68	1000	0.20	11 20 21 23 24 25		
IRKEL132-12S20	1200	140 100	2500	2600	1.68	2000	0.20	11 20 21 23 24 25		
IRKEL132-14S20	1400	140 100	2500	2600	1.68	2000	0.20	11 20 21 23 24 25		

NOTES:

3 trr conditions: Tj = 25°C, IFM at pi X rated IF(AV), -diF/dt = 25A/µs

10 trr conditions: Tj = 25°C, IF = 1A to VR=30V, -diF/dt = 100A/µs. Values shown in parentheses.

11 For Ifsm: 100% VRRM reapplied, Tj=Tj max.

15 For Irm: Tj=25°C

20 Value given for RthJC is per module.

21 VFM at IFM = pi X rated IF(AV), Tj=25°C.

22 RMS isolation voltage=3500V - 50Hz

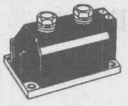
23 RMS isolation voltage=3000V - 50Hz

Fast Power Modules

International
IOR Rectifier

Diode

MAGN-A-Pak



Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A) (C)	I_{FSM} 50 Hz (A)	I_{FSM} 60Hz (A)	V_{FM} (V)	t_{rr} (nS)	$R_{\theta JC}$ DC (K/W)	Notes	Fax-on-Demand	Outline
IRKEL240-20S30	2000	240 100	6300	6600	1.71	3000	0.125	11 20 21 23 24		M6
IRKEL240-25S30	2500	240 100	6300	6600	1.71	3000	0.125	11 20 21 23 24		
IRKEL240-06S10	600	250 100	6750	7100	1.62	1000	0.125	11 20 21 23 24		
IRKEL240-10S10	1000	250 100	6750	7100	1.62	1000	0.125	11 20 21 23 24		
IRKEL240-12S20	1200	250 100	6750	7100	1.62	2000	0.125	11 20 21 23 24		
IRKEL240-14S20	1600	250 100	6750	7100	1.62	2000	0.125	11 20 21 23 24		

NOTES:

3 trr conditions: Tj = 25°C, IFM at pi X rated IF(AV), -diF/dt = 25A/µs
10 trr conditions: Tj = 25°C, IF = 1A to VR=30V, -diF/dt = 100A/µs. Values shown in parentheses.
11 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
15 For Irm: Tj=25°C
20 Value given for RthJC is per module.
21 VFM at IFM = pi X rated IF(AV), Tj=25°C.
22 RMS isolation voltage=3500V - 50Hz
23 RMS isolation voltage=3000V - 50Hz

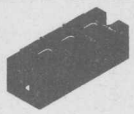
Fast Power Modules

International
IOR Rectifier

Part Number / Center Tap Circuit / Doubler Circuit / Common Cathode	V_{RRM} (V)	I_{FAV} @ T_C (A) (C)	I_{FSM} 50 Hz (A)	I_{FSM} 60Hz (A)	V_{FM} (V)	t_{rr} (nS)	$R_{\Theta JC}$ DC (K/W)	Notes	Fax-on-Demand	Outline

Diode/Diode

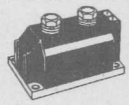
INT-A-Pak



IRKJL132-06S10		600	140	100	2500	2600	1.68	1000	0.10	11	20	21	23	24	25	M5
IRKDL132-06S10	*IRKCL132-06S10*															
IRKJL132-10S10		1000	140	100	2500	2600	1.68	1000	0.10	11	20	21	23	24	25	
IRKDL132-10S10	*IRKCL132-10S10*															
IRKJL132-12S20		1200	140	100	2500	2600	1.68	2000	0.10	11	20	21	23	24	25	
IRKDL132-12S20	*IRKCL132-12S20*															
IRKJL132-14S20		1400	140	100	2500	2600	1.68	2000	0.10	11	20	21	23	24	25	
IRKDL132-14S20	*IRKCL132-14S20*															

Diode/Diode

MAGN-A-Pak



IRKJL240-20S30		2000	240	100	6300	6600	1.71	3000	0.063	11	20	21	23	24	25	M6
IRKDL240-20S30	*IRKCL240-20S30*															
IRKJL240-25S30		2500	240	100	6300	6600	1.71	3000	0.063	11	20	21	23	24	25	
IRKDL240-25S30	*IRKCL240-25S30*															
IRKJL240-06S10		600	250	100	6750	7100	1.62	1000	0.063	11	20	21	23	24	25	
IRKDL240-06S10	*IRKCL240-06S10*															
IRKJL240-10S10		1000	250	100	6750	7100	1.62	1000	0.063	11	20	21	23	24	25	
IRKDL240-10S10	*IRKCL240-10S10*															
IRKJL240-12S20		1200	250	100	6750	7100	1.62	2000	0.063	11	20	21	23	24	25	
IRKDL240-12S20	*IRKCL240-12S20*															
IRKJL240-14S20		1400	250	100	6750	7100	1.62	2000	0.063	11	20	21	23	24	25	
IRKDL240-14S20	*IRKCL240-14S20*															
Not available		1600	460	82	11100	11800	2.05	2000	0.032	11	20	21	23	24	25	
IRKDL450-16S20	*Not available*															
Not available		2000	460	82	11100	11800	2.05	2000	0.032	11	20	21	23	24	25	
IRKDL450-20S20	*Not available*															
Not available		2500	460	82	11100	11800	2.05	2000	0.032	11	20	21	23	24	25	
IRKDL450-25S20	*Not available*															

NOTES:

3 trr conditions: Tj = 25°C, IFM at pi X rated IF(AV), -diF/dt = 25A/µs
10 trr conditions: Tj = 25°C, IF = 1A to VR=30V, -diF/dt = 100A/µs. Values shown in parentheses.
11 For Ifsm: 100% VRRM reapplied, Tj=Tj max.
15 For Irm: Tj=25°C
20 Value given for RthJC is per module.
21 VFM at IFM = pi X rated IF(AV), Tj=25°C.
22 RMS isolation voltage=3500V - 50Hz
23 RMS isolation voltage=3000V - 50Hz

Rectifiers — CECC-Qualifed, Europe

Mfg. in Italy

DO-203AA (DO-4)

Part Number	Voltage (V)	Current (A)	CECC Specs	Issue Number	Issue Date	Level of Quality Assessment and CECC 50 000 Screen Level Options	Fax-on-Demand
12F(R)10	100	12	50 009-37	2	6/91	F,FA,FB,FC,FD,L,LA,LB,LC,LD	20009
12F(R)100	1000	12					20009
12F(R)120	1200	12					20009
12F(R)20	200	12					20009
12F(R)40	400	12					20009
12F(R)60	600	12					20009
12F(R)80	800	12					20009
16F(R)10	100	16					20009
16F(R)100	1000	16					20009
16F(R)120	1200	16					20009
16F(R)20	200	16					20009
16F(R)40	400	16					20009
16F(R)60	600	16					20009
16F(R)80	800	16					20009
6F(R)100	1000	6					20009
6F(R)120	1200	6					20009
6F(R)60	600	6					20009
6F(R)80	800	6					20009
6F(R)10	100	6					20009
6F(R)20	200	6					20009
6F(R)40	400	6					20009

Rectifiers — CECC-Qualifed, Europe

Mfg. in Italy

DO-203AB (DO-5)

Part Number	Voltage (V)	Current (A)	CECC Specs	Issue Number	Issue Date	Level of Quality Assessment and CECC 50 000 Screen Level Options	Fax-on-Demand
40HF(R)10	100	40	50 009-38	2	6/91	F,FA,FB,FC,FD,L,LA,LB,LC,LD	20014
40HF(R)100	1000	40					20014
40HF(R)120	1200	40					20014
40HF(R)140	1400	40					20014
40HF(R)160	1600	40					20014
40HF(R)20	200	40					20014
40HF(R)40	400	40					20014
40HF(R)60	600	40					20014
40HF(R)80	800	40					20014
70HF(R)10	100	70	50 009-27				20014
70HF(R)100	1000	70					20014
70HF(R)120	1200	70					20014
70HF(R)140	1400	70					20014
70HF(R)160	1600	70					20014
70HF(R)20	200	70					20014
70HF(R)40	400	70					20014
70HF(R)60	600	70					20014
70HF(R)80	800	70					20014
85HF(R)10	100	85	50 009-40				20014
85HF(R)100	1000	85					20014
85HF(R)120	1200	85					20014
85HF(R)20	200	85					20014
85HF(R)40	400	85					20014
85HF(R)60	600	85					20014
85HF(R)80	800	85					20014

Thyristors — CECC Qualified, Europe

TO-208AA (TO-48)

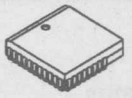
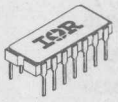
Part Number	Voltage (V)	Current (A)	CECC Specs	Issue Number	Issue Date	Level of Quality Assessment and CECC 50 000 Screen Level Options	Fax-on-Demand
10RIA10	100	10	50 011-008	2	30072	F,FL	30060
10RIA100	1000	10					30060
10RIA120	1200	10					30060
10RIA20	200	10					30060
10RIA40	400	10					30060
10RIA60	600	10					30060
10RIA80	800	10					30060
16RIA10	100	16				F,FL	30060
16RIA100	1000	16					30060
16RIA120	1200	16					30060
16RIA20	200	16					30060
16RIA40	400	16					30060
16RIA60	600	16					30060
16RIA80	800	16					30060
22RIA10	100	22				F,FL	30060
22RIA100	1000	22					30060
22RIA120	1200	22					30060
22RIA20	200	22					30060
22RIA40	400	22					30060
22RIA60	600	22					30060
22RIA80	800	22					30060
25RIA10	100	25				F,FL	30060
25RIA100	1000	25					30060
25RIA120	1200	25					30060
25RIA20	200	25					30060
25RIA40	400	25					30060
25RIA60	600	25					30060
25RIA80	800	25					30060

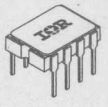
Thyristors — CECC Qualified, Europe

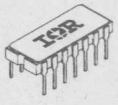
TO-208AC (TO-65)

Part Number	Voltage (V)	Current (A)	CECC Specs	Issue Number	Issue Date	Level of Quality Assessment and CECC 50 000 Screen Level Options	Fax-on-Demand
50RIA10	100	50	50 011-008	2	31747	F,FL	30062
50RIA100	1000	50					30062
50RIA120	1200	50					30062
50RIA20	200	50					30062
50RIA40	400	50					30062
50RIA60	600	50					30062
50RIA80	800	50					30062

Control Integrated Circuits

Part Number	VS Offset Supply Voltage (V)	VBS, VCC Supply Voltage (V)	IOUT Sink, Source (A)	Fax-on-Demand	Outline
High & Low Side Driver					LCC 
IR2110E4	-4 to 400	10 to 20	2	60086	P9
IR2110E6	-4 to 600	10 to 20	2	60065	P9
High & Low Side Driver					MO-036AB 
IR2110L4	-4 to 400	10 to 20	2	60085	P22
IR2110L6	-4 to 600	10 to 20	2	60074	P22

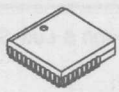
Part Number	VS Floating Supply Offset (V)	VB Floating Supply (V)	VCC Fixed Supply (V)	VO Output Voltage (V)	Fax-on-Demand	Outline
High & Low Side Driver						MO-036AA 
IR2125Z	-5 to 400	VS +12 to VS +18	12 to 18	VS +0.1 to VS -0.1	60024	P21

Part Number	VS Floating Supply Offset (V)	VB Floating Supply (V)	VCC Fixed Supply (V)	Typical IOUT Source / Sink (V)	Fax-on-Demand	Outline
Three-Phase Driver						MO-038AB 
IR2130D	-5 to 400	VS +10 to VS +20	10 to 20	250mA / 500 mA	60022	P22

HEXFET® Power MOSFETs

Radiation Hardened

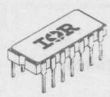
LCC



Part Number	Channel	B_{VDSS} (V)	$R_{DS(on)}$ (Ω)	I_D @ T_C =25°C (A)	I_D @ T_C =100°C (A)	Total Dose Rating Rads (Si)	P_D @ T_C= 25°C (W)	Fax-on-Demand	Outline
IRHE7110	N-Channel	100	0.6	3.1	2	100	11		H20
IRHE7130		100	0.18	8	5	100	22		
IRHE7230		200	0.4	4.5	2.5	100	22		
IRHE8110		100	0.6	3.1	2	1000	11		
IRHE8130		100	0.18	8	5	1000	22		
IRHE8230		200	0.4	4.5	2.5	1000	22		
IRHE9130	P-Channel	-100	0.3	-6	-3.5	100	22		
IRHE9230		-200	0.8	-3.6	-2.2	100	22		

Radiation Hardened

MO-036AB



IRHG7110	N-Channel	100	0.7	1	0.6	100	1.4	90670	H29
IRHG6110	N- and P-Channel	100	0.7	1	0.6	100	1.4		
		-100	1.4	-.75	-0.5	100	1.4		

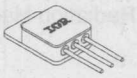
Part Number	Channel	B_{VDSS} (V)	$R_{DS(on)}$ (Ω)	I_D @ T_C =25°C (A)	I_D @ T_C =100°C (A)	Total Dose Rating Rads (Si)	P_D @ T_C= 25°C (W)	Fax-on-Demand	Outline
Radiation Hardened									SMD-1 
IRHN7054	N-Channel	60	0.027	35	30	100	150	90884	H21
IRHN7130		100	0.18	14	9	100	75	90821	
IRHN7150		100	0.055	34	21	100	150	90720	
IRHN7230		200	0.4	9	6	100	75	90822	
IRHN7250		200	0.1	26	16	100	150	90679	
IRHN7450		500	0.45	11	7	100	150		
IRHN8054		60	0.027	35	30	1000	150	90884	
IRHN8130		100	0.18	14	9	1000	75	90821	
IRHN8150		100	0.055	34	21	1000	150	90720	
IRHN8230		200	0.4	9	6	1000	75	90822	
IRHN8250		200	0.1	26	16	1000	150	90679	
IRHN8450		500	0.45	11	7	1000	150		
JANSF2N7268U		100	0.065	34	21	300	150		
JANSF2N7269U		200	0.1	26	16	300	150		
JANSF2N7270U		500	0.45	11	7	300	150		
JANSF2N7394U		60	0.027	35	30	300	150		
JANSG2N7268U		100	0.065	34	21	600	150		
JANSG2N7269U		200	0.1	26	16	600	150		
JANSG2N7270U		500	0.45	11	7	600	150		
JANSG2N7394U		60	0.027	35	30	600	150		
JANSH2N7268U		100	0.065	34	21	1000	150		
JANSH2N7269U		200	0.1	26	16	1000	150		
JANSH2N7270U		500	0.45	11	7	1000	150		
JANSH2N7394U		60	0.027	35	30	1000	150		
JANSR2N7268U		100	0.065	34	21	100	150		
JANSR2N7269U		200	0.1	26	16	100	150		
JANSR2N7270U		500	0.45	11	7	100	150		
JANSR2N7394U		60	0.027	35	30	100	150		
IRHN9130	P-Channel	-100	0.3	-11	-7	100	75	90886	
IRHN9150		-100	0.12	-22	-14	100	150	90885	
IRHN9230		-200	0.8	-6.5	-4	100	75	91445	
IRHN9250		-200	0.315	-14	-9	100	150	91300	

Part Number	Channel	B_{VDSS} (V)	$R_{DS(on)}$ (Ω)	I_D @ T_C=25°C (A)	I_D @ T_C=100°C (A)	Total Dose Rating Rads (Si)	P_D @ T_C= 25°C (W)	Fax-on-Demand	Outline
Radiation Hardened								SMD-2 	
IRHNA7064	N-Channel	60	0.015	75	56	100	300	91416	H30
IRHNA7160		100	0.045	51	32.5	100	300	91396	
IRHNA7260		200	0.07	43	27	100	300	91397	
IRHNA8064		60	0.015	75	56	1000	300	91416	
IRHNA8160		100	0.045	51	32.5	1000	300	91396	
IRHNA8260		200	0.07	43	27	1000	300	91397	
IRHNA9064	P-Channel	-60	0.055	-48	-30	100	300	91447	
IRHNA9160		-100	0.087	-38	-24	100	300	91433	
IRHNA9260		-200	0.22	-24	-15	100	300		
Radiation Hardened								TO-204AA (TO-3) 	
IRH7130	N-Channel	100	0.18	14	9	100	75		H20
IRH7230		200	0.4	9	6	100	75		
IRH7450		500	0.45	11	7	100	150		
IRH8130		100	0.18	14	9	1000	75		
IRH8230		200	0.4	9	6	1000	75		
IRH8450		500	0.45	11	7	1000	150		
IRH9130	P-Channel	-100	0.3	-11	-7	100	75		
IRH9230		-200	0.8	-6	-4	100	75	91391	
Radiation Hardened								TO-204AE 	
IRH7054	N-Channel	60	0.027	45	32	100	150		H24
IRH7150		100	0.055	38	24	100	150		
IRH7250		200	0.1	26	17	100	150		
IRH8054		60	0.027	45	32	1000	150		
IRH8150		100	0.055	38	24	1000	150		
IRH8250		200	0.1	26	17	1000	150		
IRH9150	P-Channel	-100	0.12	-21	-13	100	150		
IRH9250		-200	0.3	-14	-9	100	150	91312	

Part Number	Channel	B_{VDSS} (V)	$R_{DS(on)}$ (Ω)	I_D @ T_C =25°C (A)	I_D @ T_C =100°C (A)	Total Dose Rating Rads (Si)	P_D @ T_C= 25°C (W)	Fax-on-Demand	Outline
Radiation Hardened								TO-205AF (TO-39) 	
IRHF7110	N-Channel	100	0.6	3.5	2.2	100	15	90671	H22
IRHF7130		100	0.18	8	5	100	25	90653	
IRHF7210		200	1.5	2	1.3	100	15		
IRHF7230		200	0.4	5.5	3.5	100	25	90672	
IRHF7234		250	0.48	4.8	3	100	25		
IRHF8110		100	0.6	3.5	2.2	1000	15	90671	
IRHF8130		100	0.18	8	5	1000	25	90653	
IRHF8210		200	1.5	2	1.3	1000	15		
IRHF8230		200	0.4	5.5	3.5	1000	25		
IRHF8234		250	0.48	4.8	3	100	25		
JANSF2N7261		100	0.18	8	5	300	25		
JANSF2N7262		200	0.4	5.5	3.5	300	25		
JANSG2N7261		100	0.18	8	5	600	25		
JANSG2N7262		200	0.4	5.5	3.5	600	25		
JANSH2N7261		100	0.18	8	5	1000	25		
JANSH2N7262		200	0.4	5.5	3.5	1000	25		
JANSR2N7261		100	0.18	8	5	100	25		
JANSR2N7262		200	0.4	5.5	3.5	100	25		
IRHF9130	P-Channel	-100	0.3	-6.5	-4.1	100	25	90882	
IRHF9230		-200	0.8	-4	-2.4	100	25	91312	
JANSR2N7389		-100	0.3	-6.5	-4.1	100	25		
JANSR2N7390		-200	0.8	-4	-2.4	100	25		

Radiation Hardened

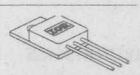
TO-254AA

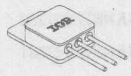
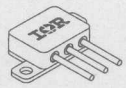


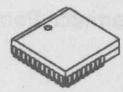
Part Number	Channel	B_{VDSS} (V)	$R_{DS(on)}$ (Ω)	I_D @ T_C=25°C (A)	I_D @ T_C=100°C (A)	Total Dose Rating Rads (Si)	P_D @ T_C= 25°C (W)	Fax-on-Demand	Outline
IRHM7054	N-Channel	60	0.027	35	30	100	150		H25
IRHM7064		60	0.021	35	35	100	250		
IRHM7130		100	0.18	14	9	100	75		
IRHM7150		100	0.065	34	21	100	150	90675	
IRHM7160		100	0.045	35	30	100	250	91331	
IRHM7230		200	0.4	9	6	100	75		
IRHM7250		200	0.1	26	16	100	150	90674	
IRHM7254		250	0.12	23	15	100	150		
IRHM7260		200	0.07	35	25	100	250	91332	
IRHM7360		400	0.22	22	14	100	250	90823	
IRHM7450		500	0.45	11	7	100	150	90673	
IRHM8054		60	0.027	35	30	1000	150		
IRHM8064		60	0.021	35	35	1000	250		
IRHM8130		100	0.18	14	9	1000	75		
IRHM8150		100	0.065	34	21	1000	150	90675	
IRHM8160		100	0.045	35	30	1000	250	91331	
IRHM8230		200	0.4	9	6	1000	75		
IRHM8250		200	0.1	26	16	1000	150	90674	
IRHM8254		250	0.12	23	15	1000	150		
IRHM8260		200	0.07	35	25	1000	250	91332	
IRHM8360		400	0.22	22	14	1000	250	90823	
IRHM8450		500	0.45	11	7	1000	150	90673	
JANSF2N7268		100	0.065	34	21	300	150		
JANSF2N7269		200	0.1	26	16	300	150		
JANSF2N7270		500	0.45	11	7	300	150		
JANSF2N7394		60	0.027	35	30	300	150		
JANSG2N7268		100	0.065	34	21	600	150		
JANSG2N7269		200	0.1	26	16	600	150		
JANSG2N7270		500	0.45	11	7	600	150		
JANSG2N7394		60	0.027	35	30	600	150		
JANSH2N7268		100	0.065	34	21	1000	150		
JANSH2N7269		200	0.1	26	16	1000	150		
JANSH2N7270		500	0.45	11	7	1000	150		
JANSH2N7394		60	0.027	35	30	1000	150		
JANSR2N7268		100	0.065	34	21	100	150		
JANSR2N7269		200	0.1	26	16	100	150		

Government and Space Products

International
IOR Rectifier

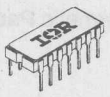
Part Number	Channel	B_{VDSS} (V)	$R_{DS(on)}$ (Ω)	I_D @ T_C =25°C (A)	I_D @ T_C =100°C (A)	Total Dose Rating Rads (Si)	P_D @ T_C= 25°C (W)	Fax-on-Demand	Outline
JANSR2N7270	N-Channel	500	0.45	11	7	100	150		H25
JANSR2N7394		60	0.027	35	30	100	150		
IRHM9064	P-Channel	-60	0.06	-35	-26	100	250	91438	
IRHM9130		-100	0.3	-11	-7	100	75	90888	
IRHM9150		-100	0.12	-21	-13	100	150		
IRHM9160		-100	0.087	-35	-22	100	250	91415	
IRHM9230		-200	0.8	-6.5	-4.1	100	75		
IRHM9250		-200	0.315	-14	-9	100	150	91299	
IRHM9260		-200	0.23	-21	-13	100	250		
Radiation Hardened								TO-257AA	
IRHY7130CM	N-Channel	100	0.18	14.4	9.1	100	75	91274	H28
IRHY7230CM		200	0.4	9.4	6	100	75	91273	
IRHY8130CM		100	0.18	14.4	9.1	1000	75	91274	
IRHY8230CM		200	0.4	9.4	6	1000	75	91273	
JANSF2N7280		100	0.18	14.4	9.1	300	75	91274	
JANSF2N7281		200	0.4	9.4	6	300	75	91273	
JANSG2N7280		100	0.18	14.4	9.1	600	75	91274	
JANSG2N7281		200	0.4	9.4	6	600	75	91273	
JANSH2N7280		100	0.18	14.4	9.1	1000	75	91274	
JANSH2N7281		200	0.4	9.4	6	1000	75	91273	
JANSR2N7380		100	0.18	14.4	9.1	100	75	91274	
JANSR2N7381		200	0.4	9.4	6	100	75	91273	
IRHY9130CM	P-Channel	-100	0.3	-11	-7	100	75	91400	
IRHY9230CM		-200	0.8	-6.5	-4	100	75	91401	
JANSR2N7382		-100	0.3	-11	-7	100	75	91400	
JANSR2N7383		-200	0.8	-6.5	-4	100	75	91401	

Part Number	Channel	B_{VDSS} (V)	$R_{DS(on)}$ (Ω)	I_D @ T_C=25°C (A)	I_D @ T_C=100°C (A)	Total Dose Rating Rads (Si)	P_D @ T_C= 25°C (W)	Fax-on-Demand	Outline
SEE Hardened								SMD-1 	
IRHN7254SE	N-Channel	250	0.12	23	15	100	150		H21
IRHN7450SE		500	0.51	12	7	100	150	91313	
IRHN7C50SE		600	0.6	10	7	100	150	91476	
SEE Hardened								SMD-2 	
IRHNA7264SE	N-Channel	250	0.11	34	21	100	300	91432	H30
IRHNA7360SE		400	0.2	24	15	100	300	91398	
IRHNA7460SE		500	0.32	20	13	100	300	91399	
SEE Hardened								TO-204AA 	
IRH7254SE	N-Channel	250	0.12	23	15	100	150		H23
IRH7450SE		500	0.45	11	7	100	150		
IRH7C50SE		600	0.6	10.4	6.5	100	150		
SEE Hardened								TO-254AA 	
IRHM7254SE	N-Channel	250	0.12	23	15	100	150		H25
IRHM7264SE		250	0.11	31	19	100	250	91393	
IRHM7360SE		400	0.2	22	14	100	250	91224	
IRHM7450SE		500	0.51	12	7	100	150	91223	
IRHM7460SE		500	0.32	18	12	100	250	91394	
IRHM7C50SE		600	0.6	10	7	100	150	91252	
SEE Hardened								TO-259AA 	
IRHI7360SE	N-Channel	400	0.2	24	15	100	300	91446	H27
IRHI7460SE		500	0.32	20	13	100	300	91475	

Part Number	Channel	B_{VDSS} (V)	$R_{DS(on)}$ (Ω)	I_D @ T_C=25°C (A)	I_D @ T_C=100°C (A)	P_D @ T_C= 25°C (W)	Fax-on-Demand	Outline
Hermetic Packages								LCC 
IRFE024	N-Channel	60	0.15	6.7	4.2	14		H20
IRFE034		60	0.05	15.5	9.5	22		
IRFE110		100	0.6	3.1	2	11		
IRFE120		100	0.3	4.5	3	14		
IRFE130		100	0.18	7.4	4.7	22		
IRFE210		200	1.5	1.8	1.2	11		
IRFE220		200	0.8	2.8	1.8	14		
IRFE230		200	0.4	4.8	3.1	22		
IRFE310		400	3.6	1.2	0.74	11		
IRFE320		400	1.8	1.8	1.1	14		
IRFE330		400	1	3.0	1.9	22		
IRFE420		500	3	1.4	0.9	14		
IRFE430		500	1.5	2.5	1.6	22		
IRFE9024	P-Channel	-60	0.28	-5.4	-3.4	14		
IRFE9110		-100	1.2	-2.2	-1.4	11		
IRFE9120		-100	0.6	-3.5	-2.2	14		
IRFE9130		-100	0.3	-6.1	-3.8	22		
IRFE9210		-200	3	-1.3	-0.84	11		
IRFE9220		-200	1.5	-2.1	-1.5	14		
IRFE9230		-200	0.8	-3.6	-2.2	22		

Hermetic Packages

MO-036AB



Part Number	Channel	B_{VDSS} (V)	$R_{DS(on)}$ (Ω)	I_D @ T_C =25°C (A)	I_D @ T_C =100°C (A)	P_D @ T_C= 25°C (W)	Fax-on-Demand	Outline
IRFG110	N-Channel	100	0.7	1	0.6	1.4		H29
JANTX2N7334		100	0.7	1	0.6	1.4		
JANTXV2N7334		100	0.7	1	0.6	1.4		
IRFG9110	P-Channel	-100	1.4	-0.75	-0.5	1.4		
JANTX2N7335		-100	1.4	-0.75	-0.5	1.4		
JANTXV2N7335		-100	1.4	-0.75	-0.5	1.4		
IRFG5110	Dual N- and P-Channel	100	0.7	1	0.6	1.4		
		-100	0.7	-1	-0.6	1.4		
IRFG6110		100	0.7	1	0.6	1.4		
		-100	1.4	-.75	-0.5	1.4		
JANTX2N7336		100	0.7	1	0.6	1.4		
		-100	1.4	-.75	-0.5	1.4		
JANTXV2N7336		100	0.7	1	0.6	1.4		
		-100	1.4	-.75	-0.5	1.4		

Hermetic Packages

SMD-1

Part Number	Channel	B_{VDSS} (V)	$R_{DS(on)}$ (Ω)	I_D @ T_C =25°C (A)	I_D @ T_C =100°C (A)	P_D @ T_C= 25°C (W)	Fax-on-Demand	Outline
IRFN044	N-Channel	60	0.04	44	27	125		H21
IRFN054		60	0.02	55	40	150		
IRFN140		100	0.077	28	20	125		
IRFN150		100	0.07	34	21	150		
IRFN240		200	0.18	18	11	125		
IRFN250		200	0.1	27.4	17	150		
IRFN340		400	0.55	10	6	125		
IRFN350		400	0.315	14	9	150		
IRFN440		500	0.85	8	5	125		
IRFN450		500	0.415	12	8	150		
IRFNG40		1000	3.5	3.9	2.5	125		
IRFNG50		1000	2	5.5	3.5	150		
JANTX2N7218U		100	0.077	28	20	125		
JANTX2N7219U		200	0.18	18	11	125		
JANTX2N7221U		400	0.55	10	6	125		
JANTX2N7222U		500	0.85	8	5	125		
JANTX2N7224U		100	0.07	34	21	150		
JANTX2N7225U		200	0.1	27.4	17	150		
JANTX2N7227U		400	0.315	14	9	150		
JANTX2N7228U		500	0.415	12	8	150		
JANTXV2N7218U		100	0.077	28	20	125		
JANTXV2N7219U		200	0.18	18	11	125		
JANTXV2N7221U		400	0.55	10	6	125		
JANTXV2N7222U		500	0.85	8	5	125		
JANTXV2N7224U		100	0.07	34	21	150		
JANTXV2N7225U		200	0.1	27.4	17	150		
JANTXV2N7227U		400	0.315	14	9	150		
JANTXV2N7228U		500	0.415	12	8	150		
IRFN9034	P-Channel	-60	0.2	-12	-8	75		
IRFN9140		-100	0.2	-18	-11	125		
IRFN9240		-200	0.51	-11	-7	125		
JANS2N7236U		-100	0.2	-18	-11	125		
JANS2N7237U		-200	0.51	-11	-7	125		
JANTX2N7236U		-100	0.2	-18	-11	125		
JANTX2N7237U		-200	0.51	-11	-7	125		
JANTXV2N7236U		-100	0.2	-18	-11	125		

Part Number	Channel	B_{VDSS} (V)	$R_{DS(on)}$ (Ω)	I_D @ T_C =25°C (A)	I_D @ T_C =100°C (A)	P_D @ T_C= 25°C (W)	Fax-on-Demand	Outline
JANTXV2N7237U	P-Channel	-200	0.51	-11	-7	125		H21
Hermetic Packages							TO-204AA	
JANTX2N6756	N-Channel	100	0.18	14	9	75		H23
JANTX2N6758		200	0.4	9	6	75		
JANTX2N6760		400	1	5.5	3.5	75		
JANTX2N6762		500	1.5	4.5	3	75		
JANTX2N6770		500	0.4	12	7.75	150		
JANTXV2N6756		100	0.18	14	9	75		
JANTXV2N6758		200	0.4	9	6	75		
JANTXV2N6760		400	1	5.5	3.5	75		
JANTXV2N6762		500	1.5	4.5	3	75		
JANTXV2N6770		500	0.4	12	7.75	150		
JANTX2N6804	P-Channel	-100	0.3	-11	-7	75		
JANTX2N6806		-200	0.8	-6.5	-4	75		
JANTXV2N6804		-100	0.3	-11	-7	75		
JANTXV2N6806		-200	0.8	-6.5	-4	75		
Hermetic Packages							TO-204AE	
JANTX2N6764	N-Channel	100	0.055	38	24	150		H24
JANTX2N6766		200	0.085	30	19	150		
JANTX2N6768		400	0.3	14	9	150		
JANTXV2N6764		100	0.055	38	24	150		
JANTXV2N6766		200	0.085	30	19	150		
JANTXV2N6768		400	0.3	14	9	150		

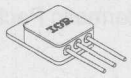
Hermetic Packages

TO-205AF (TO-39)

Part Number	Channel	B_{VDSS} (V)	$R_{DS(on)}$ (Ω)	I_D @ T_C =25°C (A)	I_D @ T_C =100°C (A)	P_D @ T_C= 25°C (W)	Fax-on-Demand	Outline
JANTX2N6782	N-Channel	100	0.6	3.5	2.25	15		H22
JANTX2N6784		200	1.5	2.25	1.5	15		
JANTX2N6786		400	3.6	1.25	0.8	15		
JANTX2N6788		100	0.3	6	3.5	20		
JANTX2N6790		200	0.8	3.5	2.25	20		
JANTX2N6792		400	1.8	2	1.25	20		
JANTX2N6794		500	3	1.5	1	20		
JANTX2N6796		100	0.18	8	5	25		
JANTX2N6798		200	0.4	5.5	3.5	25		
JANTX2N6800		400	1	3	2	25		
JANTX2N6802		500	1.5	2.5	1.5	25		
JANTXV2N6782		100	0.6	3.5	2.25	15		
JANTXV2N6784		200	1.5	2.25	1.5	15		
JANTXV2N6786		400	3.6	1.25	0.8	15		
JANTXV2N6788		100	0.3	6	3.5	20		
JANTXV2N6790		200	0.8	3.5	2.25	20		
JANTXV2N6792		400	1.8	2	1.25	20		
JANTXV2N6794		500	3	1.5	1	20		
JANTXV2N6796		100	0.18	8	5	25		
JANTXV2N6798		200	0.4	5.5	3.5	25		
JANTXV2N6800		400	1	3	2	25		
JANTXV2N6802		500	1.5	2.5	1.5	25		
JANS2N6849	P-Channel	-100	0.3	-6.5	-4.1	25		
JANS2N6851		-200	0.8	-4	-2.4	25		
JANTX2N6845		-100	0.6	-4	-2.6	20		
JANTX2N6847		-200	1.5	-2.5	-1.6	20		
JANTX2N6849		-100	0.3	-6.5	-4.1	25		
JANTX2N6851		-200	0.8	-4	-2.4	25		
JANTXV2N6845		-100	0.6	-4	-2.6	20		
JANTXV2N6847		-200	1.5	-2.5	-1.6	20		
JANTXV2N6849		-100	0.3	-6.5	-4.1	25		
JANTXV2N6851		-200	0.8	-4	-2.4	25		

Hermetic Packages

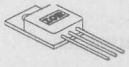
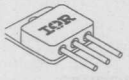
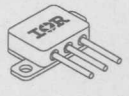
TO-254AA

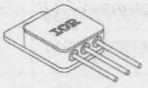


Part Number	Channel	B_{VDSS} (V)	$R_{DS(on)}$ (Ω)	I_D @ T_C=25°C (A)	I_D @ T_C=100°C (A)	P_D @ T_C= 25°C (W)	Fax-on-Demand	Outline
IRFM044	N-Channel	60	0.04	35	28	125		H25
IRFM054		60	0.027	35	35	150	90709	
IRFM064		60	0.017	35	35	250		
IRFM140		100	0.077	28	20	125		
IRFM150		100	0.07	34	21	150	90487	
IRFM240		200	0.18	18	11	125		
IRFM250		200	0.1	27.4	17	150	90554	
IRFM260		200	0.07	35*	26	250	91388	
IRFM340		400	0.55	10	6	125		
IRFM350		400	0.315	14	9	150	90491	
IRFM360		400	0.2	23	14	250		
IRFM440		500	0.85	8	5	125		
IRFM450		500	0.415	12	8	150	90493	
IRFM460		500	0.27	19	12	250	90727	
IRFMG40		1000	3.5	3.9	2.5	125		
IRFMG50		1000	2	5.6	3.5	150		
JANTX2N7218		100	0.077	28	20	125		
JANTX2N7219		200	0.18	18	11	125		
JANTX2N7221		400	0.55	10	6	125		
JANTX2N7222		500	0.85	8	5	125		
JANTX2N7224		100	0.07	34	21	150	90487	
JANTX2N7225		200	0.1	27.4	17	150	90554	
JANTX2N7227		400	0.315	14	9	150	90491	
JANTX2N7228		500	0.415	12	8	150	90493	
JANTXV2N7218		100	0.077	28	20	125		
JANTXV2N7219		200	0.18	18	11	125		
JANTXV2N7221		400	0.55	10	6	125		
JANTXV2N7222		500	0.85	8	5	125		
JANTXV2N7224		100	0.07	34	21	150	90487	
JANTXV2N7225		200	0.1	27.4	17	150	90554	
JANTXV2N7227		400	0.315	14	9	150	90491	
JANTXV2N7228		500	0.415	12	8	150	90493	
IRFM9034	P-Channel	-60	0.02	-12	-8	75		
IRFM9140		-100	0.2	-18	-11	125	90495	
IRFM9240		-200	0.51	-11	-7	125	90497	
JANS2N7236		-100	0.2	-18	-11	125	90495	

Government and Space Products

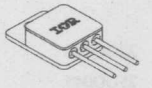
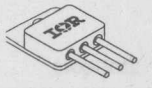
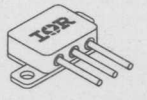
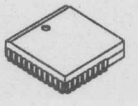
International
IOR Rectifier

Part Number	Channel	B_{VDSS} (V)	$R_{DS(on)}$ (Ω)	I_D @ T_C =25°C (A)	I_D @ T_C =100°C (A)	P_D @ T_C= 25°C (W)	Fax-on-Demand	Outline
JANS2N7237	P-Channel	-200	0.51	-11	-7	125	90497	H25
JANTX2N7236		-100	0.2	-18	-11	125	90495	
JANTX2N7237		-200	0.51	-11	-7	125	90497	
JANTXV2N7236		-100	0.2	-18	-11	125	90495	
JANTXV2N7237		-200	0.51	-11	-7	125	90497	
Hermetic Packages							TO-257AA	
IRFY044CM	N-Channel	60	0.04	16	16	100	91285	H28
IRFY130CM		100	0.18	14.4	9.1	75	91286	
IRFY140CM		100	0.077	16	16	100	91287	
IRFY240CM		200	0.18	16	10.2	100	91289	
IRFY340CM		400	0.55	8.7	5.5	100	91290	
IRFY430CM		500	1.5	4.5	2.8	75	91291	
IRFY440CM		500	0.85	7	4.4	100	91292	
IRFY9130CM	P-Channel	-100	0.3	-11.2	-7.1	75	91293	
IRFY9140CM		-100	0.2	-15.8	-10	100	91294	
IRFY9240CM		-200	0.51	-9.4	-6	100	91295	
Hermetic Packages							TO-258AA	
IRFV064	N-Channel	60	0.017	45	45	300	90877	H20
IRFV260		200	0.06	45	29	300	92002	
IRFV360		400	0.2	25	16	300	90816	
IRFV460		500	0.27	21	13	300	90660	
Hermetic Packages							TO-259AA	
IRFI064	N-Channel	60	0.017	45	45	300		H27
IRFI260		200	0.06	45	29	300		
IRFI360		400	0.2	25	16	300		
IRFI460		500	0.27	21	13	300		

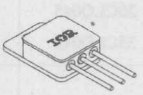
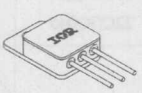
Part Number	$V_{(BR)CES}$ (V)	$V_{GE(th)}$ Min. (V)	$V_{GE(th)}$ Max. (V)	I_C @ T_C=25°C (A)	I_C @ T_C=100°C (A)	E_{TS} Typ. Loss @ T_j=125°C (mJ)	(A)	P_D Max Power Dissipation (W)	Fax-on-Demand	Outline
IGBT										
Hermetic										
									TO-254AA	
IRGMC30F	600	3.0	5.5	23	12	3.5	12	75	90714	IG21
IRGMC30U	600	3.0	5.5	17	8	1.2	8	75	90715	
IRGMC40F	600	3.0	5.5	35	20	9.0	20	125	90716	
IRGMC40U	600	3.0	5.5	31	15	2.0	15	125	90717	
IRGMC50F	600	3.0	5.5	35	30	10	30	150	90718	
IRGMC50U	600	3.0	5.5	35	20	2.8	20	150	90719	
									TO-258AA	
IRGMVC50U*	600	3.0	5.5	45	27	2.8	27	200	90825	IG22
IRGVH50F	1200	3.0	5.5	45	25	8.2	25	200	90928	
									TO-259AA	
IRGIH50F	1200	3.0	5.5	45	25	8.2	25	200	90930	IG23
IRGMIC50U*	600	3.0	5.5	45	27	2.8	27	200		

** IGBT co-packaged with UltraFast™, soft recovery HEXFRED™ Diode*

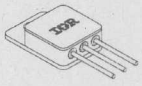
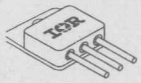
Schottky Diodes, Hermetic Packages

Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A)	(C)	V_{FM} @ I_{FM} 25°C (V)	I_{RM} @ V_{RWM} 25°C (μA)	Max. T_J (°C)	Fax-on-Demand	Outline
Common Cathode								
							SMD-1 	
15CLQ100	100	15.0	100	0.9	500	150	20351	K31
20CLQ045	45	20.0	100	0.69	500	150	20352	
35CLQ045	45	35.0	100	0.97	100	150		
							TO-254AA 	
12CGQ150	150	35.0	100	1.6	500	150	20359	K32
15CGQ100	100	35.0	100	1.3	500	150	20345	
22CGQ045	45	35.0	100	0.97	100	150	20346	
							TO-258AA 	
45CKQ100	100	45.0	100	1.13	100	150	20355	K33
60CKQ045	45	45.0	100	0.92	100	150	20347	
							TO-259AA 	
45CIQ100	100	45.0	100	1.13	100	150	20356	K34
60CIQ045	45	45.0	100	0.92	100	150	20357	
Single Die								
							LCC 	
5EQ100	100	8.0	100	0.8	500	150	20349	J30
8EQ045	45	10.0	100	0.65	500	150	20350	

Schottky Diodes, Hermetic Packages

Part Number	V_{RRM} (V)	I_{FAV} @ T_C (A)	(C)	V_{FM} @ I_{FM} 25°C (V)	I_{RM} @ V_{RWM} 25°C (µA)	Max. T_J (°C)	Fax-on-Demand	Outline
SMD-1 								
60LQ045	45	60.0	100	0.68	800	150	20357	K31
60LQ100	100	60.0	100	0.95	100	150		
TO-254AA 								
22GQ100	100	30.0	100	1.1	100	150	20353	K32
25GQ045	45	35.0	100	0.93	100	150	20354	
Series Doubler								
TO-254AA 								
22DGQ045	45	25.0	100	0.82		150	20358	K32

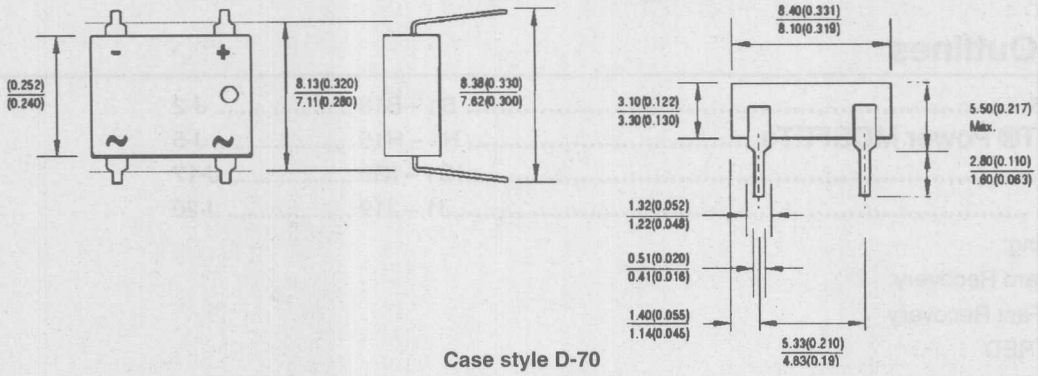
HEXFRED Diodes, Hermetic Packages

Part Number	V_{RWM} (V)	I_{FAV} @ T_C (A)	(T_C) (C)	V_{FM} @ I_{FM} 25°C (V)	I_{RM} @ V_{RWM} 25°C (μA)	$R_{\Theta JC}$ (°K/W)	Typ. I_{RRM} (A)	Typ. t_{rr} (nS)	Fax-on-Demand	Outline
SMD-1 										
HFA40HF120	1200	7	100	3	20	2.5	10	135	20376	J31
HFA40HF60	600	12	100	1.7	10	2.5	10	75	20381	
TO-254AA 										
HFA35HB120	1200	11	100	3	20	1.5	10	135		J34
HFA35HB120C	1200	15	100	4.3	10	2	8	95		K32
HFA35HB60	600	22	100	1.7	10	1.5	10	75		J34
HFA35HB60C	600	30	100	2	10	2	6	60		K32
TO-258AA 										
HFA45HC120C	1200	28	100	3.9	20	1.2	10	135		K33
HFA45HC60C	600	45	100	2	10	1.2	10	75		
TO-259AA 										
HFA45HI120C	1200	28	100	3.9	20	1.2	10	135		K34
HFA45HI60C	600	45	100	2	10	1.2	10	75		

Case Outlines

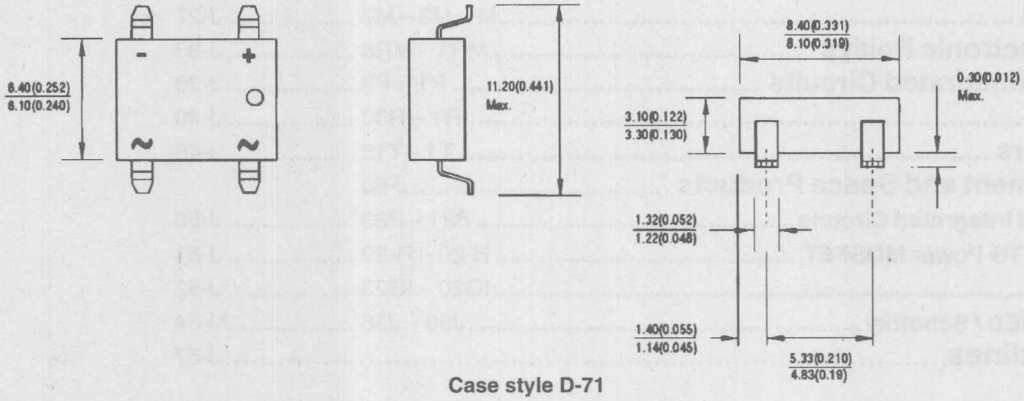
Bridges

B1



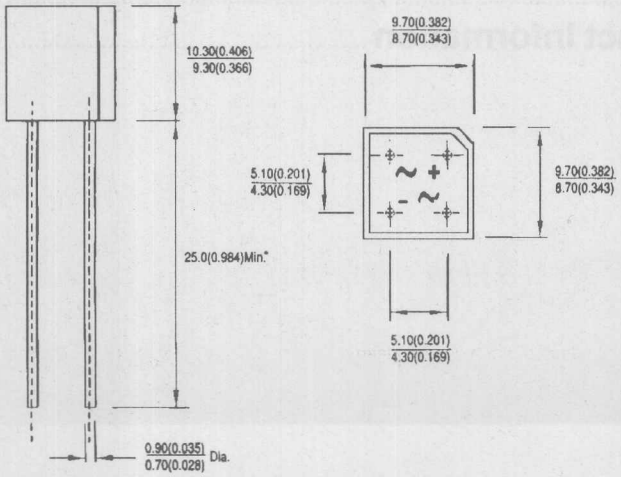
Case style D-70

B2



Case style D-71

B3



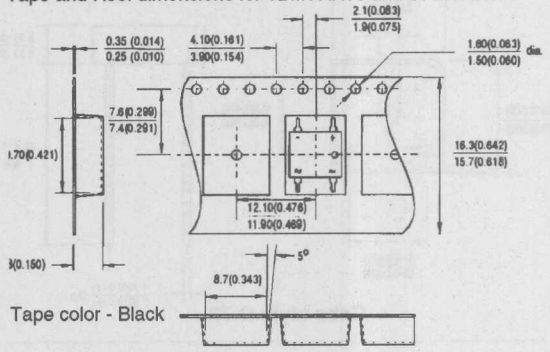
Case style D-38

*Available with 3mm or 5mm cropped leads

Bridges

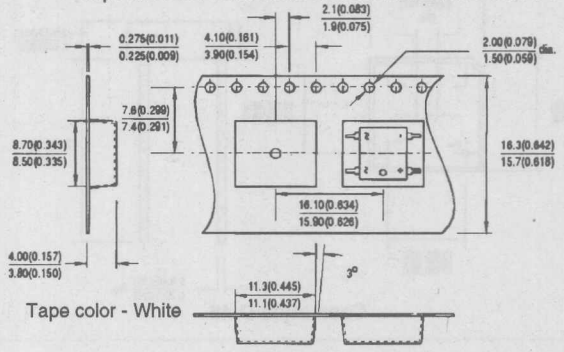
B1 and B2 Tape and Reel Information

Tape and Reel dimensions for 1B...TRR16 and DF...TRR16

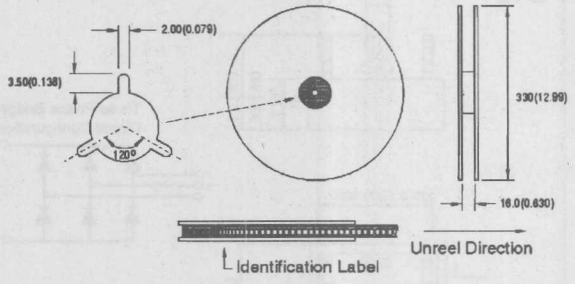


Tape color - Black

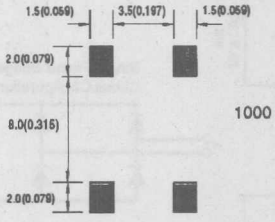
Tape and Reel dimensions for 1B...TR16 and DF...TR16



Tape color - White

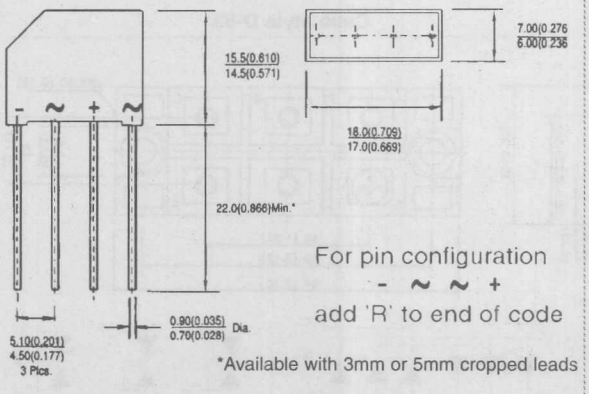


Footprint and Pad dimensions



1000 pcs per Reel

B5

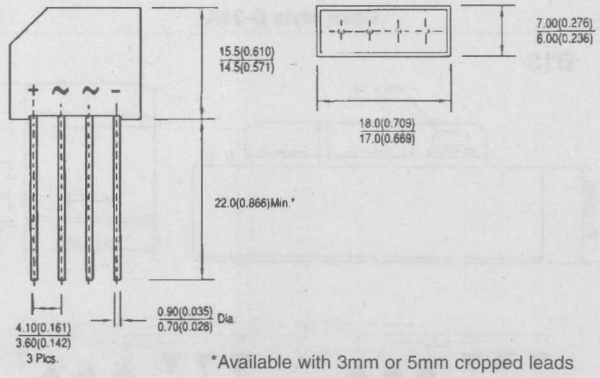


For pin configuration
- ~ ~ +
add 'R' to end of code

*Available with 3mm or 5mm cropped leads

Case style D-37

B6

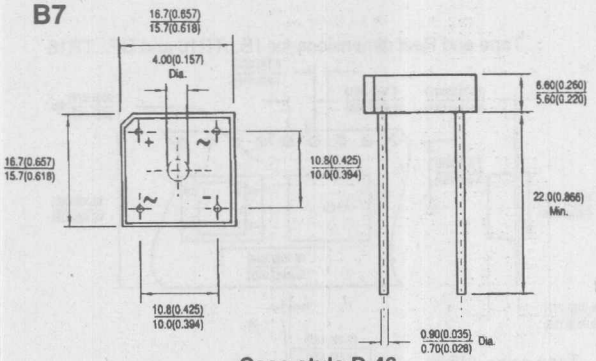


*Available with 3mm or 5mm cropped leads

Case style D-44

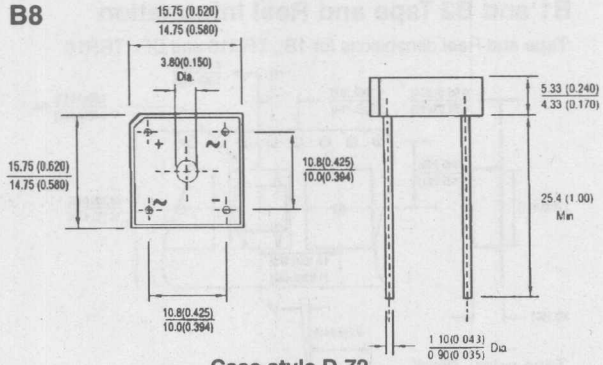
Bridges

B7



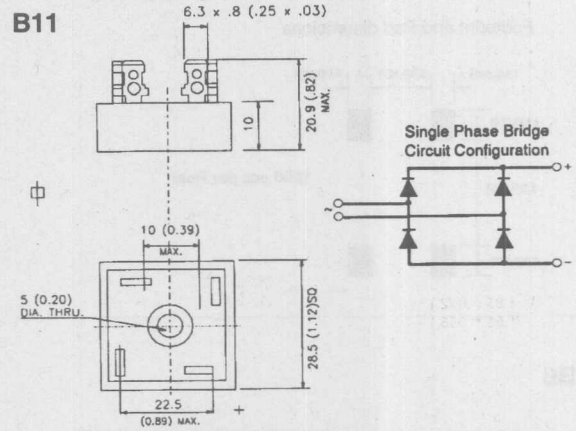
Case style D-46

B8



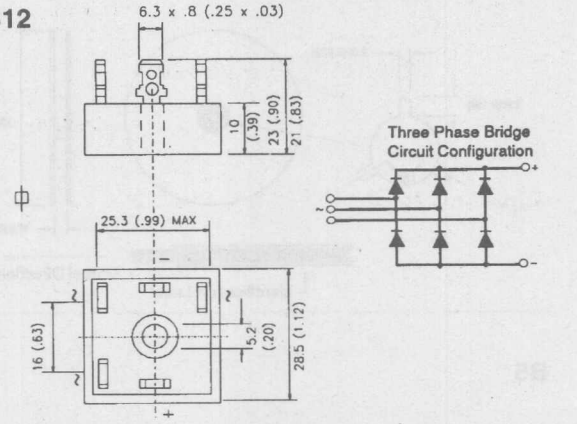
Case style D-72

B11



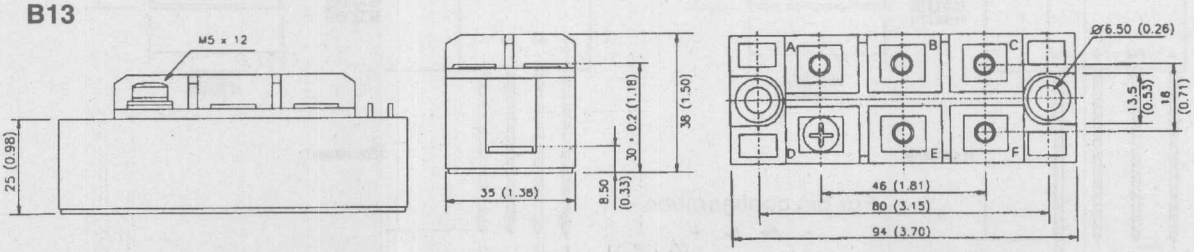
Case style D-34A

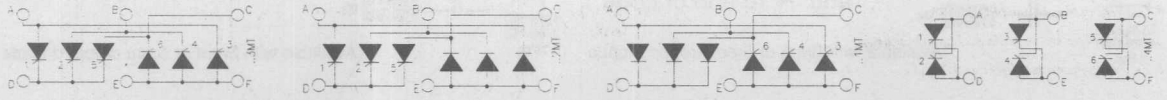
B12



Case style D-63

B13





three phase controlled bridge (53, 93, 113MT..K)

positive three phase controlled bridge (52, 92, 1132T..K)

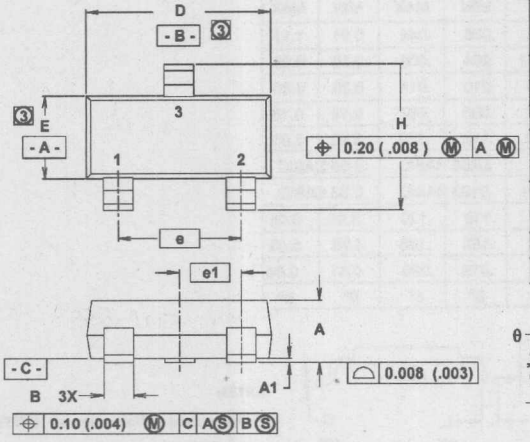
negative three phase controlled bridge (51, 91, 111MT..K)

3-phase AC controller (54,94, 104 MT..K)

Case style INT-A-Pak

HEXFET® Power MOSFETs

H1

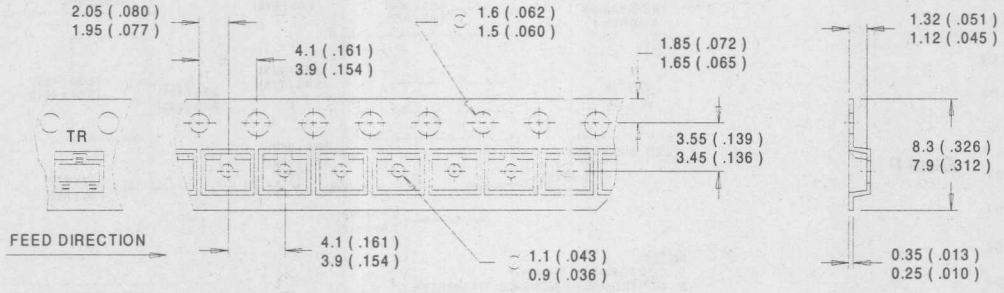


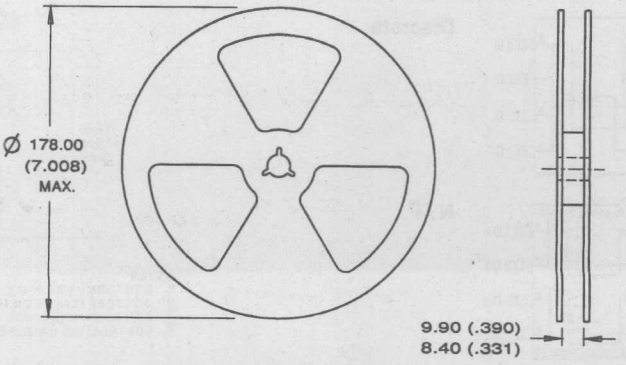
DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	.032	.044	0.82	1.11
A1	.001	.004	0.02	0.10
B	.015	.021	0.38	0.54
C	.004	.006	0.10	0.15
D	.105	.120	2.67	3.05
e	.0750 BASIC		1.90 BASIC	
e1	.0375 BASIC		0.95 BASIC	
E	.047	.055	1.20	1.40
H	.083	.098	2.10	2.50
L	.005	.010	0.13	0.25
q	0°	8°	0°	8°

LEAD ASSIGNMENTS
1 - Gate
2 - Source
3 - Drain

Case style SOT-23 (Micro3)

Tape and Reel





NOTES:

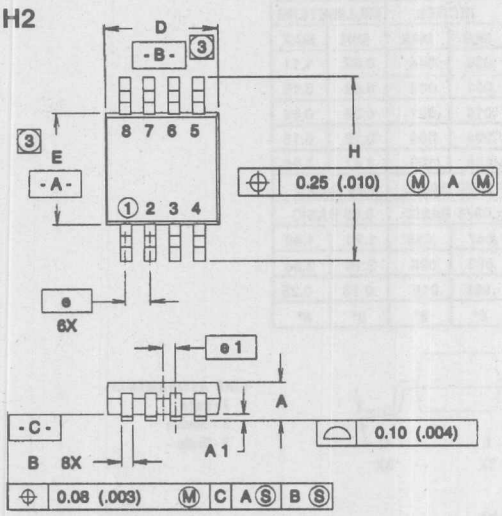
1. Controlling Dimension: MILLIMETER.

2. All dimensions are shown in millimeters (inches.)

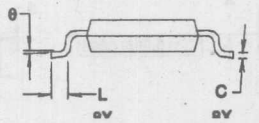
3. Outline conforms to EIA-481 and EIA-541

HEXFET® Power MOSFETs

H2



DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	.036	.044	0.91	1.11
A1	.004	.008	0.10	0.20
B	.010	.014	0.25	0.36
C	.005	.007	0.13	0.18
D	.116	.120	2.95	3.05
e	.0256 BASIC		0.65 BASIC	
e1	.0128 BASIC		0.33 BASIC	
E	.116	.120	2.95	3.05
H	.188	.198	4.78	5.03
L	.016	.026	0.41	0.66
θ	0°	6°	0°	6°



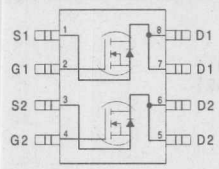
NOTES:

1. Dimensioning and tolerancing per ANSI Y14.5M, 1982.
2. Controlling Dimension: INCH.
3. Dimensions do not include mold flash.

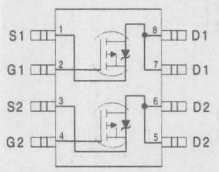
Case style Micro8

Circuit Diagrams

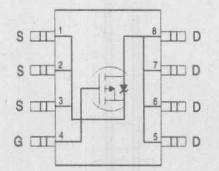
Dual N



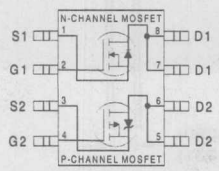
Dual P



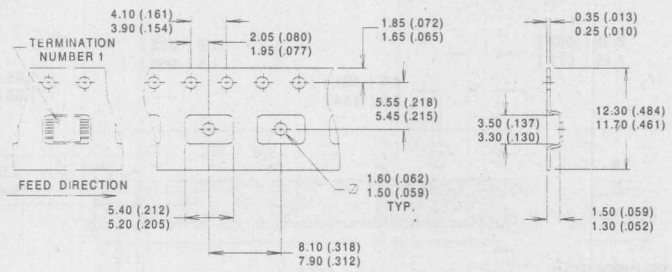
Discrete



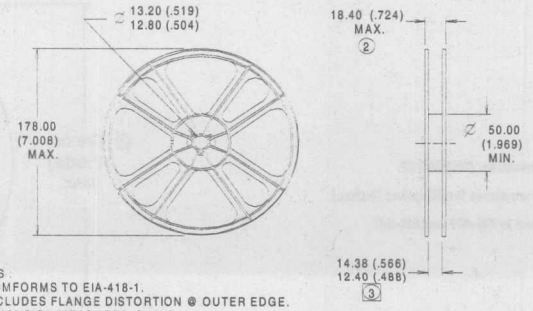
N / P



Tape and Reel



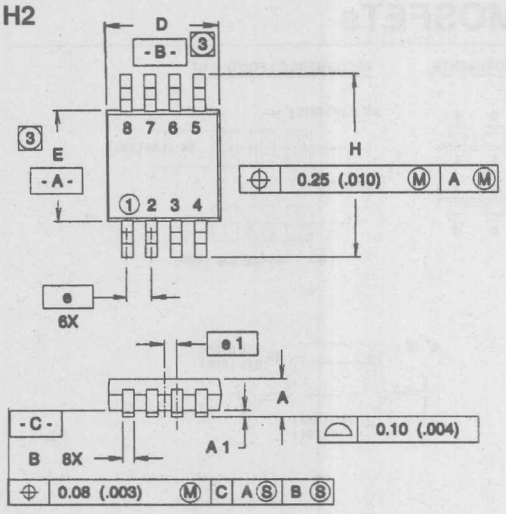
NOTES:
1. COMFORMS TO EIA-481-1.
2. CONTROLLING DIMENSION : MILLIMETER.



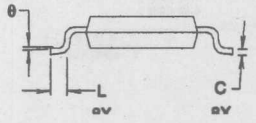
NOTES
1. COMFORMS TO EIA-418-1.
2. INCLUDES FLANGE DISTORTION @ OUTER EDGE.
3. DIMENSION MEASURED @ HUB.
4. CONTROLLING DIMENSION : MILLIMETER.

HEXFET® Power MOSFETs

H2

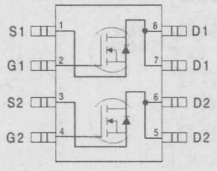


DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	.036	.044	0.91	1.11
A1	.004	.008	0.10	0.20
B	.010	.014	0.25	0.36
C	.005	.007	0.13	0.18
D	.116	.120	2.95	3.05
e	.0256 BASIC		0.65 BASIC	
e1	.0128 BASIC		0.33 BASIC	
E	.116	.120	2.95	3.05
H	.188	.198	4.78	5.03
L	.016	.026	0.41	0.66
θ	0°	6°	0°	6°

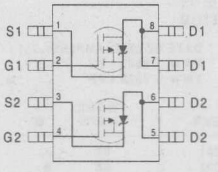


Case style Micro8

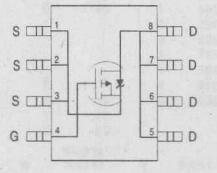
Circuit Diagrams



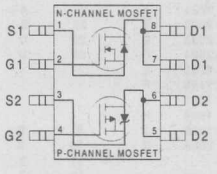
Dual N



Dual P

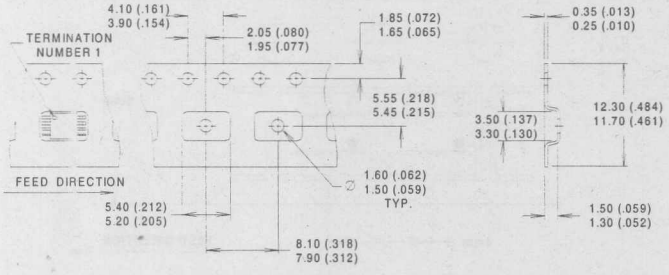


Discrete

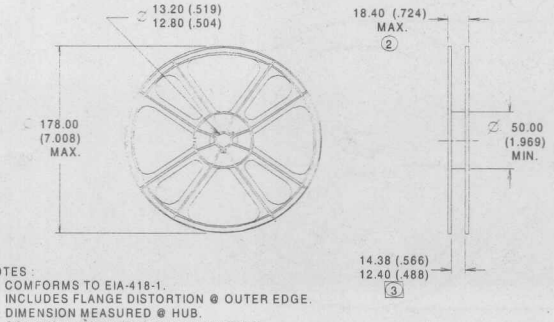


N / P

Tape and Reel



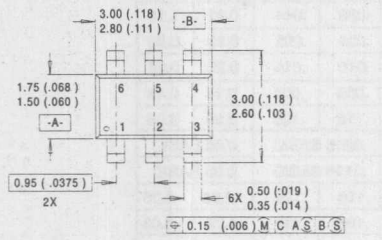
NOTES:
1. COMFORMS TO EIA-481-1.
2. CONTROLLING DIMENSION : MILLIMETER.



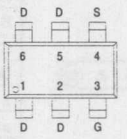
NOTES:
1. COMFORMS TO EIA-418-1.
2. INCLUDES FLANGE DISTORTION @ OUTER EDGE.
3. DIMENSION MEASURED @ HUB.
4. CONTROLLING DIMENSION : MILLIMETER.

HEXFET® Power MOSFETs

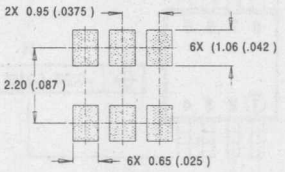
H2.5 – Micro6™

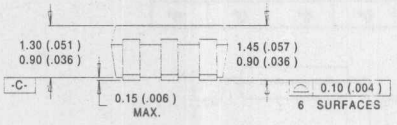


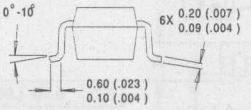
LEAD ASSIGNMENTS



RECOMMENDED FOOTPRINT

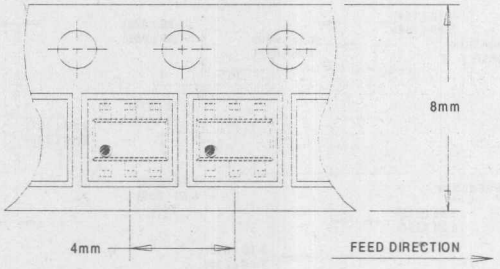




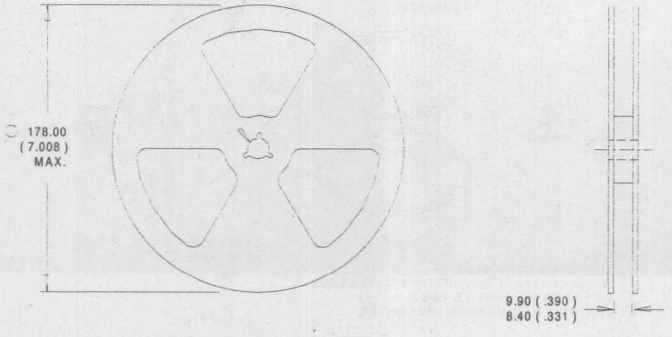


NOTES :
1. DIMENSIONING & TOLERANCING PER ANSI Y14.5M-1982.
2. CONTROLLING DIMENSION : MILLIMETER.
3. DIMENSIONS ARE SHOWN IN MILLIMETERS (INCHES).

Tape and Reel



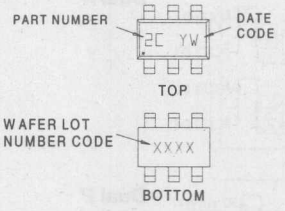
NOTES :
1. OUTLINE CONFORMS TO EIA-481 & EIA-541.



NOTES:
1. CONTROLLING DIMENSION : MILLIMETER.
2. OUTLINE CONFORMS TO EIA-481 & EIA-541.

Part Marking

EXAMPLE : THIS IS AN IRLMS6702



PART NUMBER EXAMPLES:
2A = IRLMS1902
2B = IRLMS1503
2C = IRLMS6702
2D = IRLMS5703

DATE CODE EXAMPLES:
YWW = 9603 = 6C
YWW = 9632 = FF

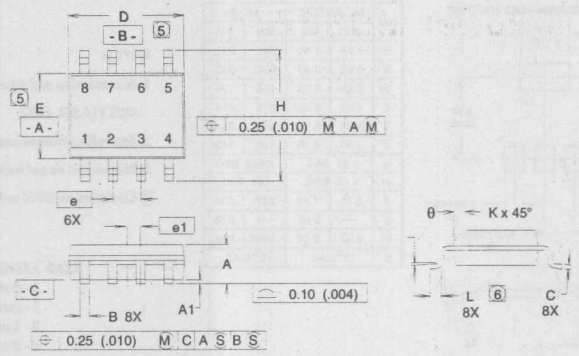
YEAR	Y	WORK WEEK	W
2001	1	01	A
2002	2	02	B
2003	3	03	C
2004	4	04	D
2005	5		
1996	6		
1997	7		
1998	8		
1999	9	▼	▼
2000	0	24	X
		25	Y
		26	Z

YEAR	Y	WORK WEEK	W
2001	A	27	A
2002	B	28	B
2003	C	29	C
2004	D	30	D
2005	E		
1996	F		
1997	G		
1998	H		
1999	J	▼	▼
2000	K	50	X
		51	Y
		52	Z

work week = (1-26) if preceded by last digit of calendar year
work week = (27-52) if preceded by a letter

HEXFET® Power MOSFETs

H3

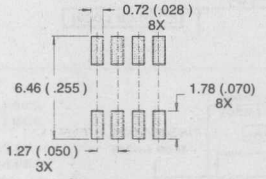


DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	.0532	.0688	1.35	1.75
A1	.0040	.0098	0.10	0.25
B	.014	.018	0.36	0.46
C	.0075	.0098	0.19	0.25
D	.189	.196	4.80	4.98
E	.150	.157	3.81	3.99
e	.050 BASIC		1.27 BASIC	
e1	.025 BASIC		0.635 BASIC	
H	.2284	.2440	5.80	6.20
K	.011	.019	0.28	0.48
L	0.16	.050	0.41	1.27
θ	0°	8°	0°	8°

NOTES:

1. Dimensioning and tolerancing per ANSI Y14.5M-1982
2. Controlling dimension: INCH
3. Dimensions are shown in millimeters (INCHES)
4. Outline conforms to JEDEC outline MS-012AA
5. Dimension does not include mold protrusions; Mold protrusions not to exceed 0.25 (.006)
6. Dimension is the length of lead for soldering to a substrate

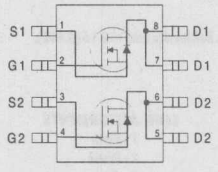
RECOMMENDED FOOTPRINT



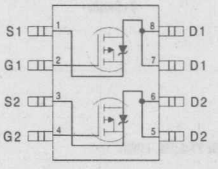
Case style SO-8

Circuit Diagrams

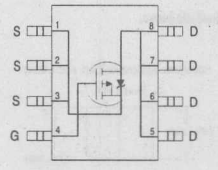
Dual N



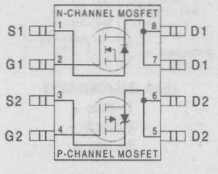
Dual P



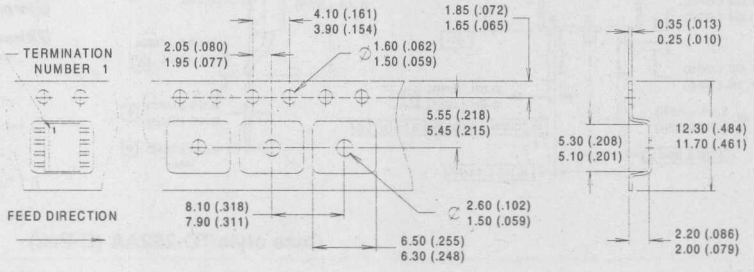
Discrete

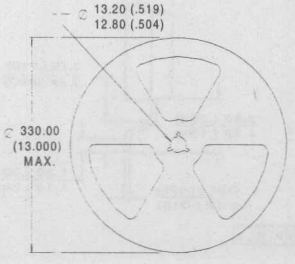


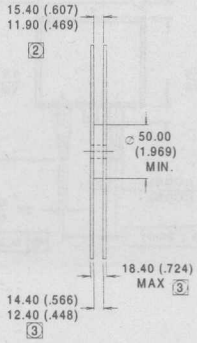
N / P



Tape and Reel





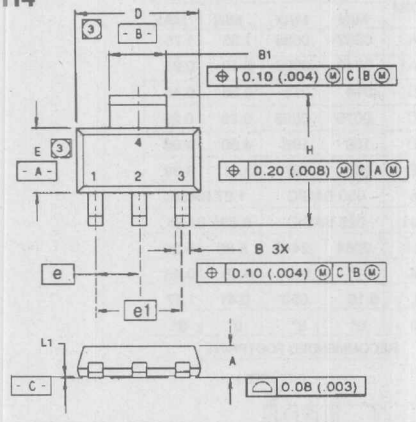


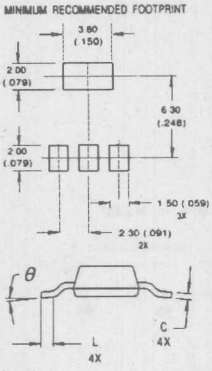
NOTES:

1 CONFORMS TO EIA-481-1
2 INCLUDES FLANGE DISTORTION @ OUTER EDGE
3 DIMENSIONS MEASURED @ HUB
4 CONTROLLING DIMENSION : METRIC

HEXFET® Power MOSFETs

H4





DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.55	1.80	.061	.071
B	0.65	0.85	.026	.033
B1	2.95	3.15	.116	.124
C	0.25	0.35	.010	.014
D	6.30	6.70	.248	.264
E	3.30	3.70	.130	.146
e	2.30 BSC		.0905 BSC	
e1	4.60 BSC		.181 BSC	
H	6.71	7.29	.287	.264
L	—	0.91	—	.036
L1	0.02	0.10	.0008	.004
θ	10° MAX		10° MAX	

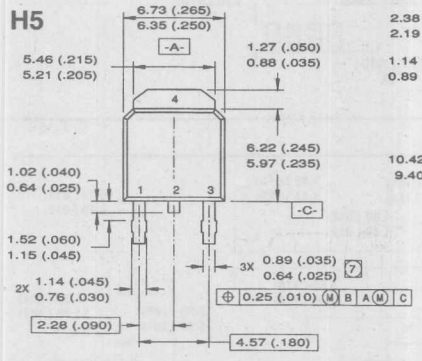
NOTES:

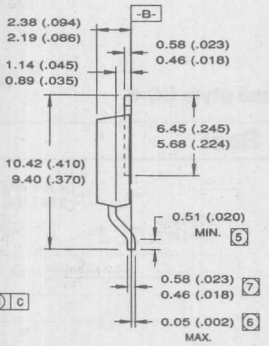
1. Dimensioning and tolerancing per ANSI Y14.5M, 1982.
2. Controlling Dimension: INCH.
3. Dimensions do not include mold flash.
4. Conforms to JEDEC outline TO-261AA.

LEAD ASSIGNMENTS
1 - Gate
2 - Drain
3 - Source
4 - Drain

Case style SOT-223

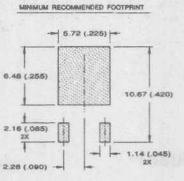
H5





NOTES:

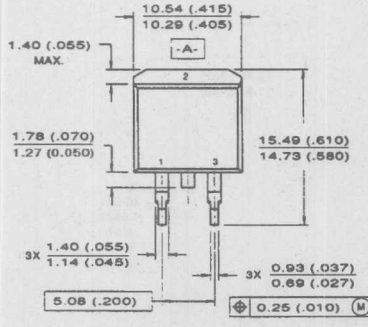
1. Dimensioning and tolerancing per ANSI Y14.5M, 1982.
2. Controlling Dimension: INCH.
3. Dimensions do not include mold flash.
4. Conforms to JEDEC outline TO-252AA.
5. Dimension is the length of lead for soldering to a substrate.
6. For positive contact at mounting.
7. Dimension does not include solder dip. Solder dip max +0.16 (0.006).

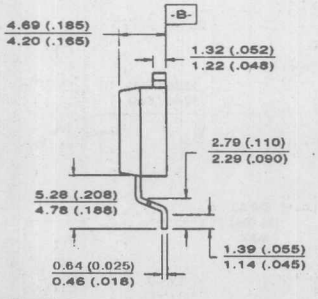


LEAD ASSIGNMENTS
1 - Gate
2 - Drain
3 - Source
4 - Drain

Case style TO-252AA (D-Pak)

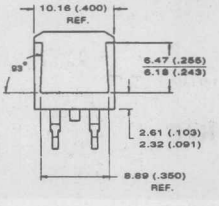
H6





NOTES:

1. Dimensions after solder dip.
2. Dimensioning and tolerancing per ANSI Y14.5M, 1982.
3. Controlling Dimension: INCH.
4. Heatsink and lead dimensions do not include burrs.

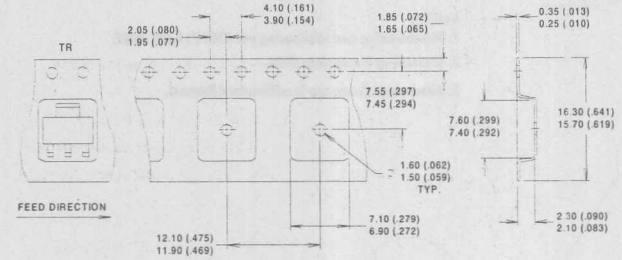


LEAD ASSIGNMENTS
1 - Gate
2 - Drain
3 - Source

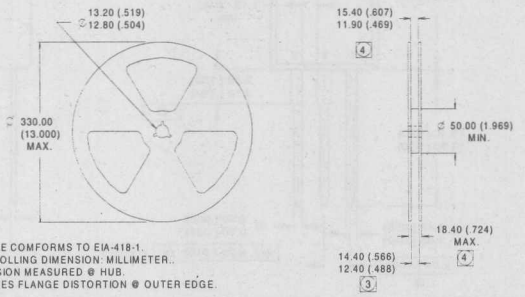
Case style D²Pak (SMD-220, TO-263)

HEXFET® Power MOSFETs

Tape and Reel – SOT-223

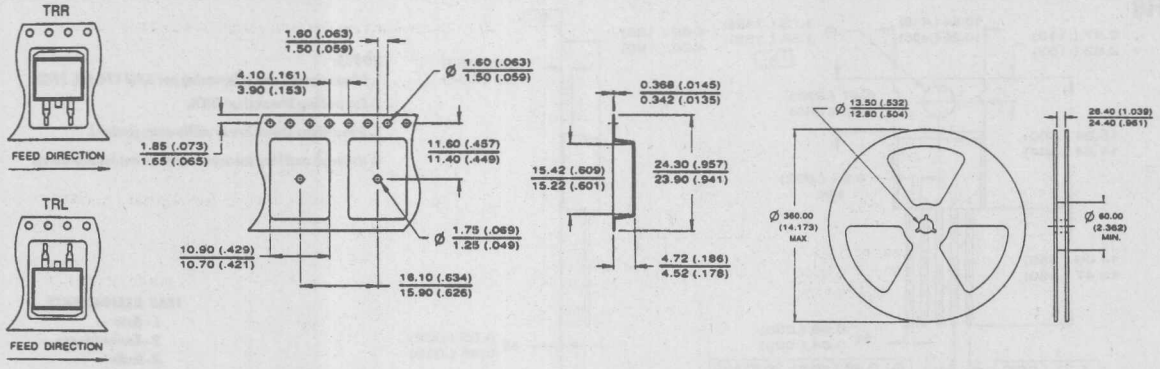


NOTES :
1. CONTROLLING DIMENSION: MILLIMETER.
2. OUTLINE CONFORMS TO EIA-481 & EIA-541.
3. EACH Ø330.00 (13.00) REEL CONTAINS 2,500 DEVICES.



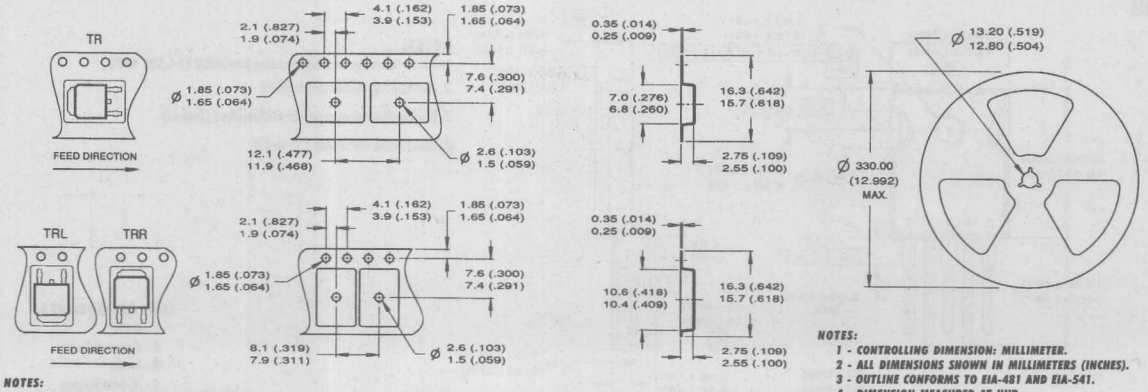
NOTES :
1. OUTLINE COMFORMS TO EIA-418-1.
2. CONTROLLING DIMENSION: MILLIMETER.
3. DIMENSION MEASURED @ HUB.
4. INCLUDES FLANGE DISTORTION @ OUTER EDGE.

Tape and Reel – D²Pak (SMD-220, TO-263)



NOTE: EACH ∅ 360.00 (14.173) REEL CONTAINS 800 DEVICES.

Tape and Reel – TO-252AA (D-Pak)

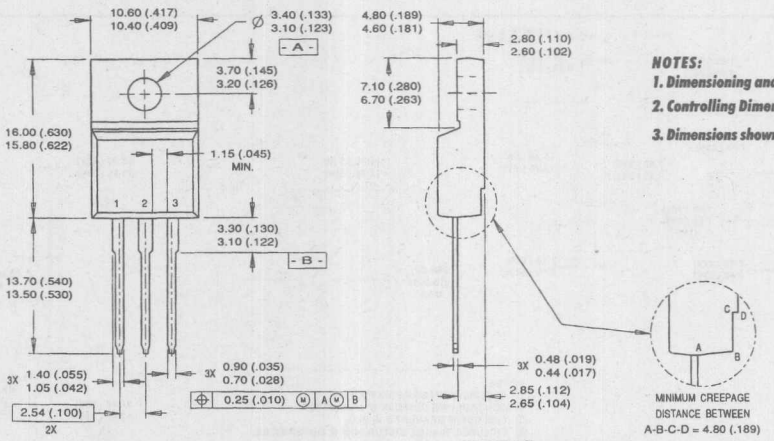


NOTES:
1 - CONTROLLING DIMENSION: MILLIMETER.
2 - ALL DIMENSIONS SHOWN IN MILLIMETERS (INCHES).
3 - OUTLINE CONFORMS TO EIA-481.

NOTES:
1 - CONTROLLING DIMENSION: MILLIMETER.
2 - ALL DIMENSIONS SHOWN IN MILLIMETERS (INCHES).
3 - OUTLINE CONFORMS TO EIA-481 AND EIA-541.
4 DIMENSION MEASURED AT HUB.
5 INCLUDES FLANGE DISTORTION AT OUTER EDGE.

HEXFET® Power MOSFETs

H7



NOTES:

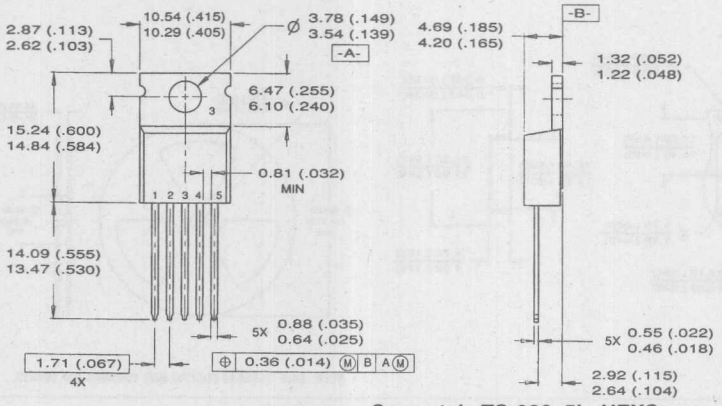
1. Dimensioning and tolerancing per ANSI Y14.5M, 1982.
2. Controlling Dimension: INCH.
3. Dimensions shown are in millimeters (inches).

LEAD ASSIGNMENTS

1 - Gate
2 - Drain
3 - Source

Case style TO-220 FullPak

H8



NOTES:

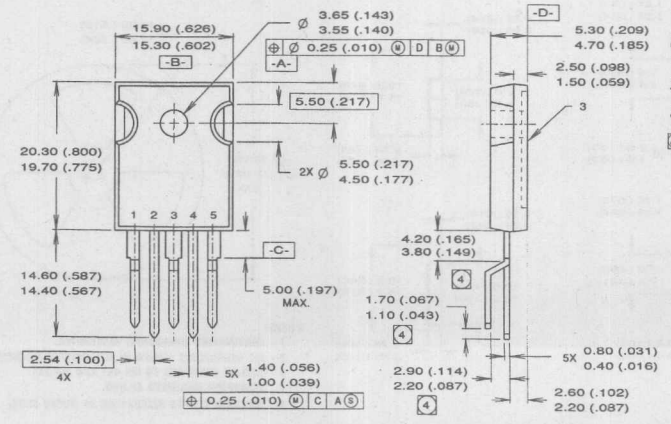
1. Dimensioning and tolerancing per ANSI Y14.5M, 1982.
2. Controlling Dimension: INCH.
3. Dimensions shown are in millimeters (inches).
4. Heatsink and lead measurements do not include burrs.

LEAD ASSIGNMENTS

1 - Gate
2 - Current Sense
3 - Drain
4 - Kelvin Source
5 - Source

Case style TO-220, 5L, HEXSense

H9



NOTES:

1. Dimensioning and tolerancing per ANSI Y14.5M, 1982.
2. Controlling Dimension: INCH.
3. Dimensions shown are in millimeters (inches).
4. Dimension for leads 1,3 and 5.

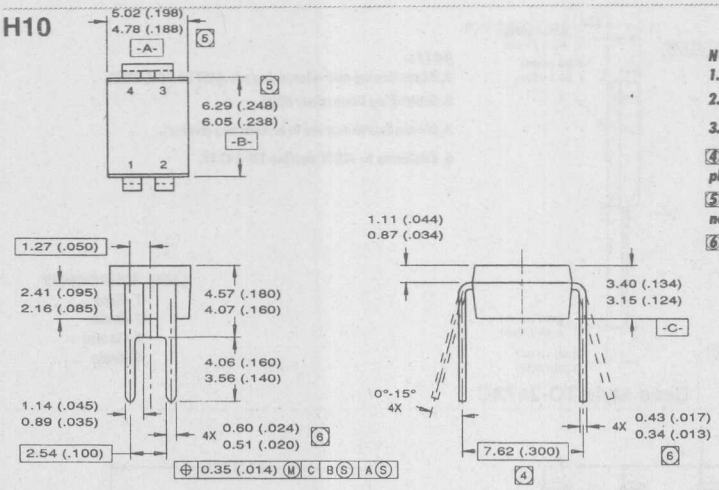
LEAD ASSIGNMENTS

1 - Gate
2 - Current Sense
3 - Drain
4 - Kelvin Source
5 - Source

Case style TO-247AC, 5L, HEXSense

HEXFET® Power MOSFETs

H10



NOTES:

1. Dimensioning and tolerancing per ANSI Y14.5M, 1982.

2. Controlling Dimension: INCH.

3. Dimensions shown are in millimeters (inches).

4 Measured with the leads constrained to be perpendicular to the datum plane C.

5 Dimension does not include mold protrusions. Mold protrusions shall not exceed 0.25 (.010).

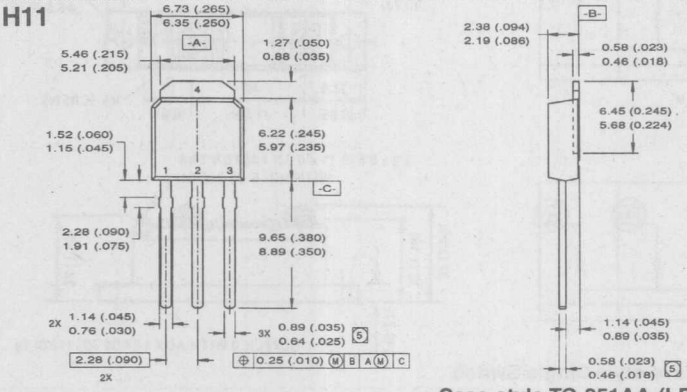
6 Dimension does not include solder dip. Solder dip max + 0.16 (.006).

LEAD ASSIGNMENTS

1 - Gate
2 - Source
3 - Drain
4 - Drain

Case style HD-1

H11



NOTES:

1. Dimensioning and tolerancing per ANSI Y14.5M, 1982.

2. Controlling Dimension: INCH.

3. Dimensions shown are in millimeters (inches).

4. Outline conforms to JEDEC outlines TO-251AA.

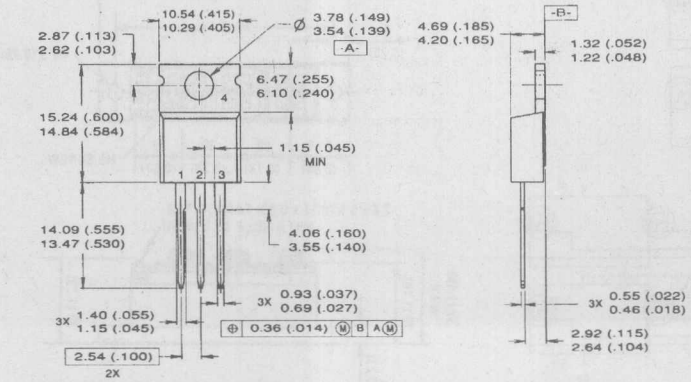
5 Dimension does not include solder dip. Solder dip max + 0.16 (.006).

LEAD ASSIGNMENTS

1 - Gate
2 - Drain
3 - Source
4 - Drain

Case style TO-251AA (I-Pak)

H12



NOTES:

1. Dimensioning and tolerancing per ANSI Y14.5M, 1982.

2. Controlling Dimension: INCH.

3. Dimensions shown are in millimeters (inches).

4. Outline conforms to JEDEC outline TO-220AB.

5. Heat sink and lead measurements do not include burrs.

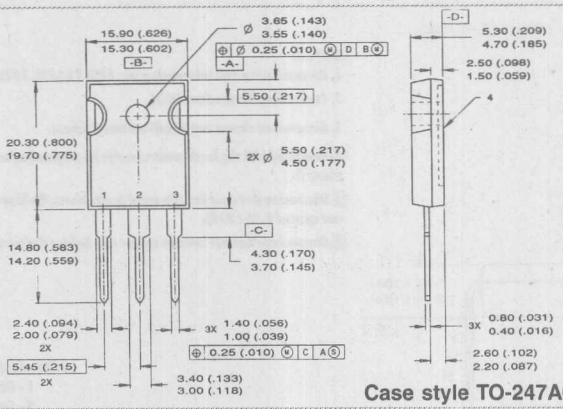
LEAD ASSIGNMENTS

1 - Gate
2 - Drain
3 - Source
4 - Drain

Case style TO-220AB

HEXFET® Power MOSFETs

H13



NOTES:
1. Dimensioning and tolerancing per ANSI Y14.5M, 1982.
2. Controlling Dimension: INCH.
3. Dimensions shown are in millimeters (inches).
4. Conforms to JEDEC outline TO-247AC.

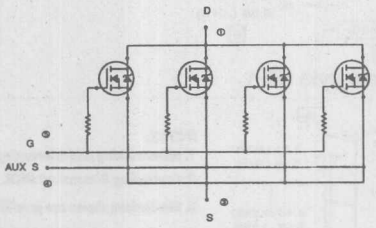
LEAD ASSIGNMENTS
1 - Gate
2 - Drain
3 - Source
4 - Drain

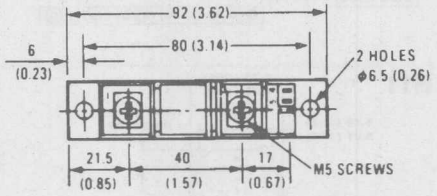
Case style TO-247AC

H14

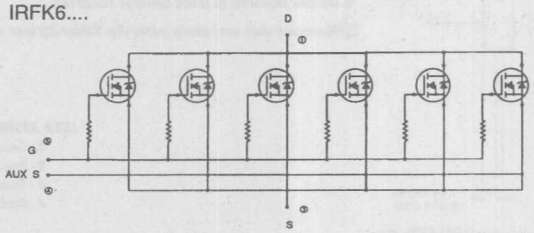
IRFK4....

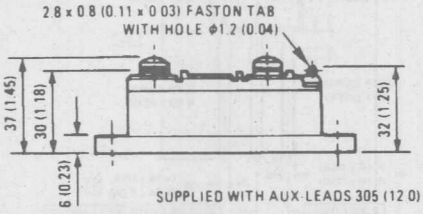
NOTES:
1. Similar to JEDEC outline TO-240AA.





IRFK6....

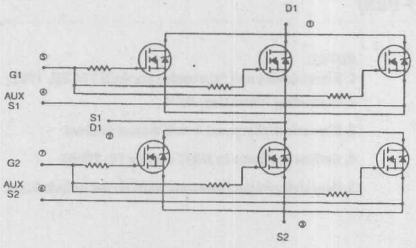


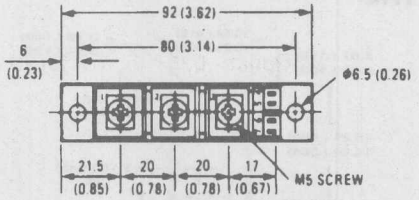


Case style Single Switch

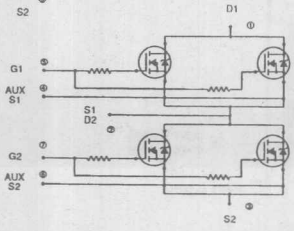
H15

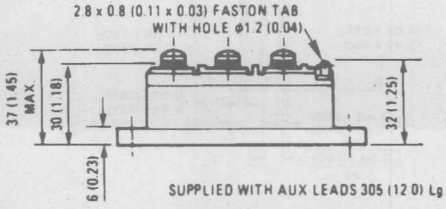
IRFK3..





IRFK2..





NOTES:
1. Similar to JEDEC outline TO-240AA.

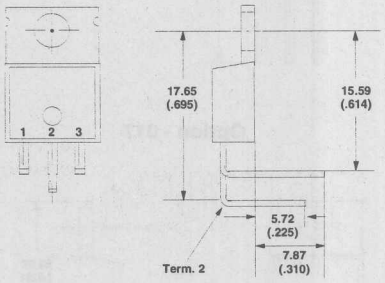
Case style Half Bridge

HEXFET® Power MOSFETs: TO-220 Optional Leadforms

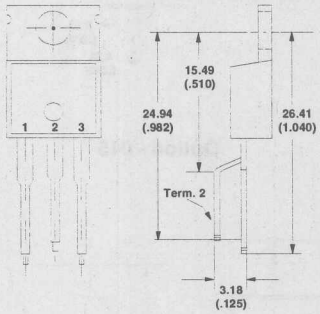
International Rectifier offers standard leadform in various configurations, allowing the flexibility to meet a variety of design requirements. IR's standard leadform offerings are illustrated here and on page 118. To order a device with leadforming, indicate the desired TO-220 HEXFET part number, then append the three-digit number of the leadform you require, e.g. to order an IRF530 with an Option-004 leadform, use the number IRF530-004. For each leadform, the correct code is given below the illustration.

NOTES:

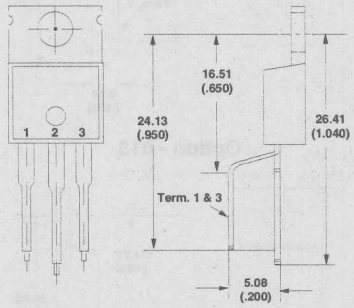
1. **Lead Assignments**
   1 - Gate
   2 - Drain
   3 - Source
2. All dimensions in millmeters (inches)



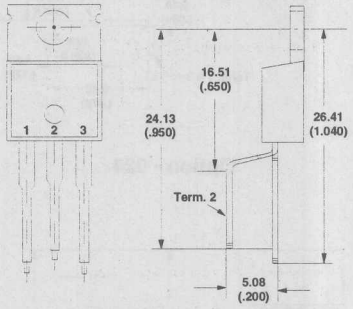
Option - 002



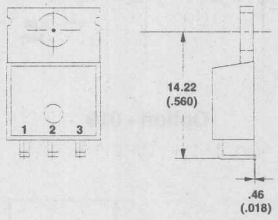
Option - 003



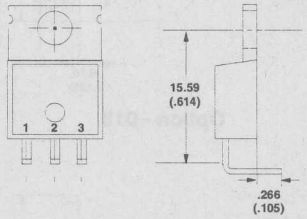
Option - 004



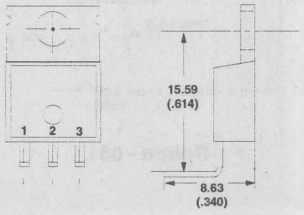
Option - 005



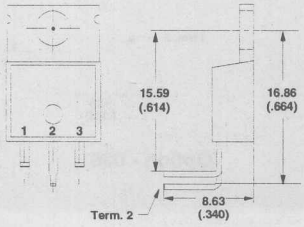
Option - 006



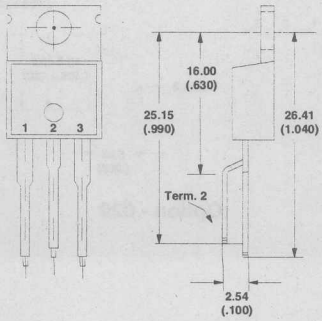
Option - 009



Option - 010



Option - 011

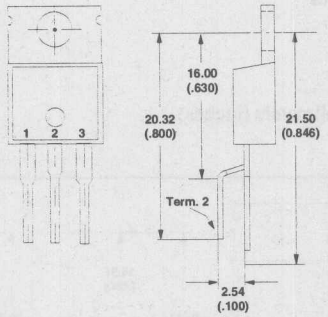


Option - 012

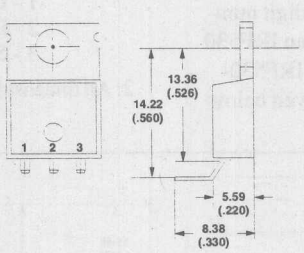
HEXFET® Power MOSFETs: TO-220 Optional Leadforms

TO-220 Optional Leadforms

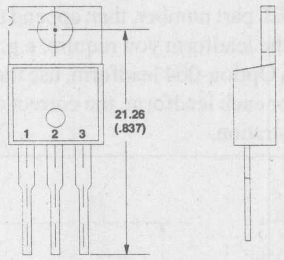
Refer to page J-15 for order information.



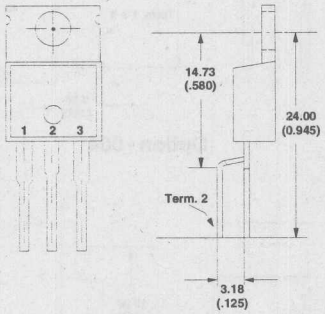
Option - 013



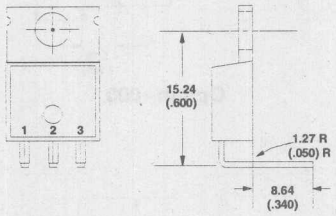
Option - 015



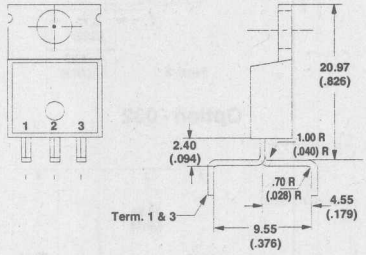
Option - 017



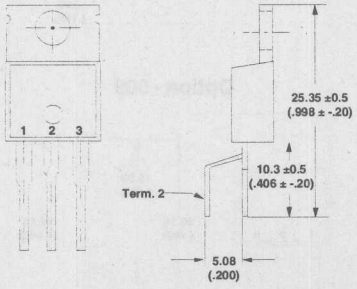
Option - 018



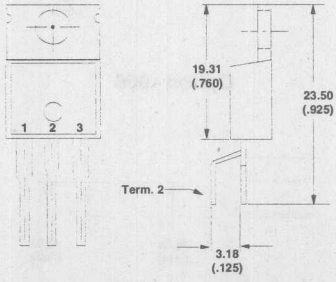
Option - 019



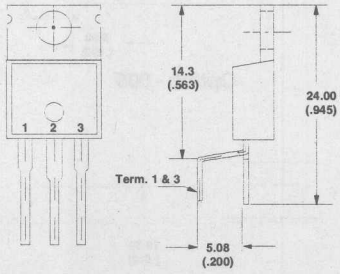
Option - 024



Option - 029



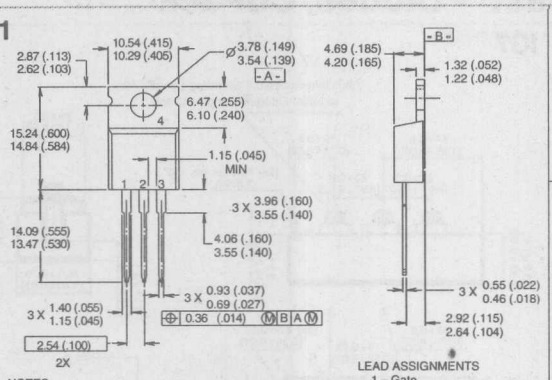
Option - 030



Option - 031

IGBTs and IGBT UltraFast™ Diodes, CoPack

IG1

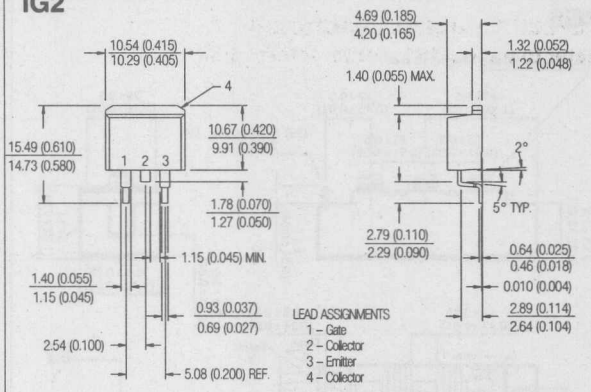


NOTES:
1. Dimensioning and tolerancing per ANSI Y14.5M, 1982
2. Controlling dimension: INCH
3. Dimensions are shown in millimeters (inches)
4. Conforms to JEDEC outline TO-220AB

LEAD ASSIGNMENTS
1 – Gate
2 – Collector
3 – Emitter
4 – Collector

Case style TO-220AB

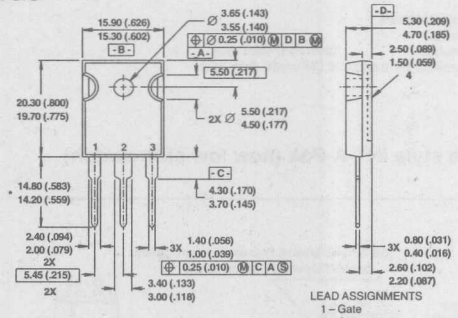
IG2



LEAD ASSIGNMENTS
1 – Gate
2 – Collector
3 – Emitter
4 – Collector

Case style D²Pak (SMD-220, TO-263)

IG3



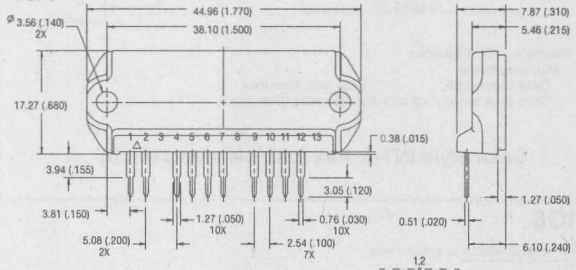
NOTES:
1. Dimensioning and tolerancing per ANSI Y14.5M, 1982
2. Controlling dimension: INCH
3. Dimensions are shown in millimeters (inches)
4. Conforms to JEDEC outline TO-247AC

LEAD ASSIGNMENTS
1 – Gate
2 – Collector
3 – Emitter
4 – Collector

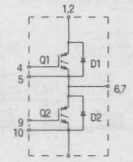
* Longer leaded (20mm) version available as TO-247AD. To order add '-E' suffix to part number.

Case style TO-247AC

IG4



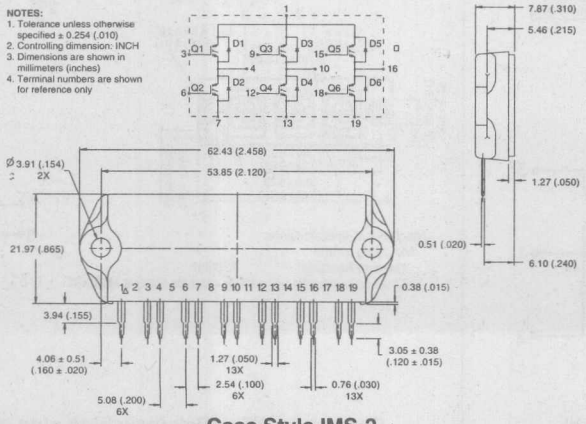
NOTES:
1. Tolerance unless otherwise specified ± 0.254 (.010)
2. Controlling dimension: INCH
3. Dimensions are shown in millimeters (inches)
4. Terminal numbers are shown for reference only



Case style IMS-1

IG5

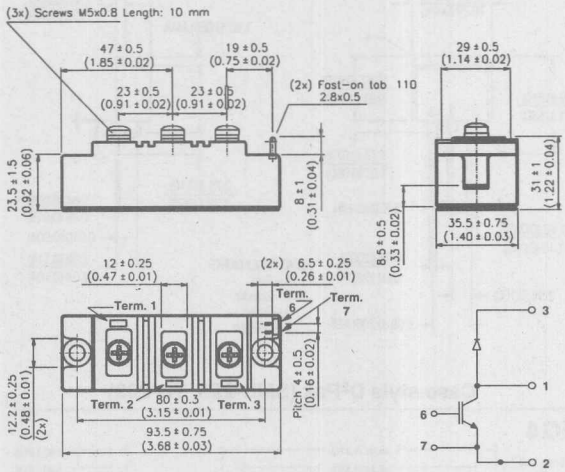
NOTES:
1. Tolerance unless otherwise specified ± 0.254 (.010)
2. Controlling dimension: INCH
3. Dimensions are shown in millimeters (inches)
4. Terminal numbers are shown for reference only



Case Style IMS-2

IGBTs and IGBT UltraFast™ Diodes, CoPack

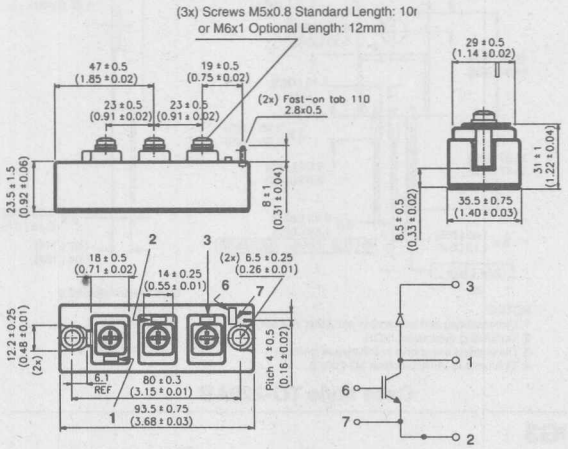
IG6



Mechanical Specifications
Mounting torque
Case-to-heatsink: 3Nm min; 4Nm max
Case-to-terminal 1 – 2 and 3: 2.5Nm min; 3Nm max

Case style INT-A-Pak (old low side switch)

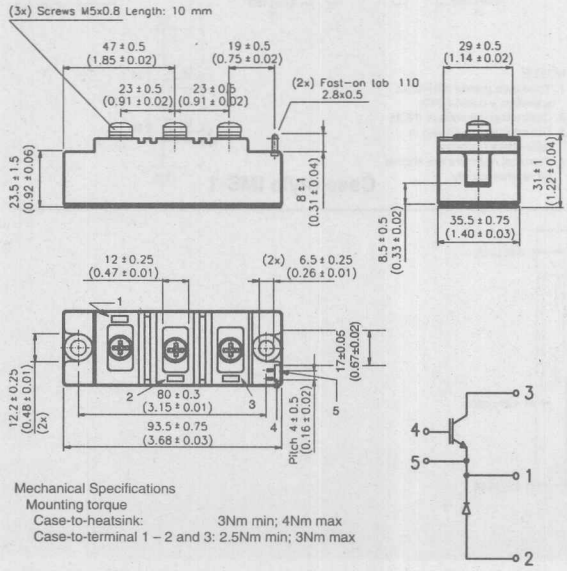
IG7



Mechanical Specifications
Mounting torque
Case-to-heatsink: 3Nm min; 4Nm max
Case-to-terminal 1 – 2 and 3: 2.5Nm min; 3Nm max

Case style INT-A-Pak (new low side switch)

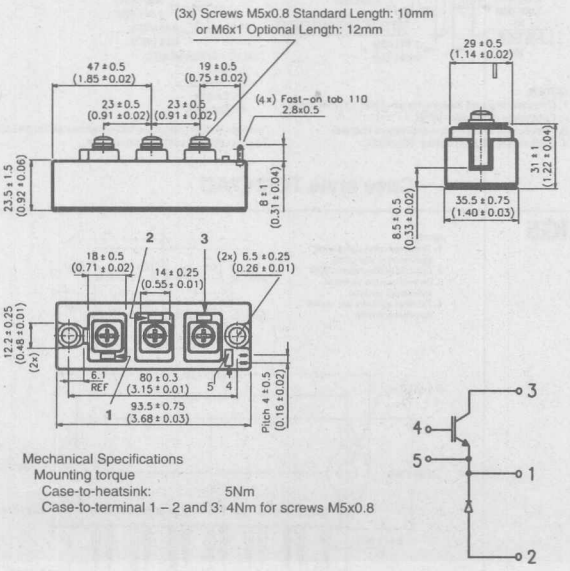
IG8



Mechanical Specifications
Mounting torque
Case-to-heatsink: 3Nm min; 4Nm max
Case-to-terminal 1 – 2 and 3: 2.5Nm min; 3Nm max

Case style INT-A-Pak (old high side switch)

IG9

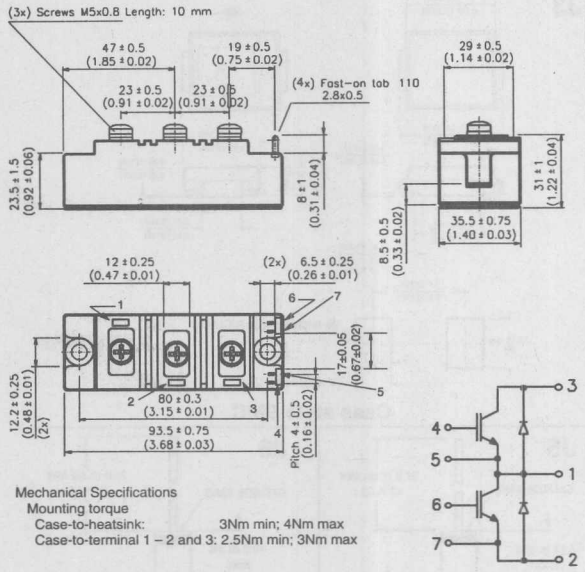


Mechanical Specifications
Mounting torque
Case-to-heatsink: 5Nm
Case-to-terminal 1 – 2 and 3: 4Nm for screws M5x0.8

Case style INT-A-Pak (new high side switch)

IGBTs and IGBT UltraFast™ Diodes, CoPack

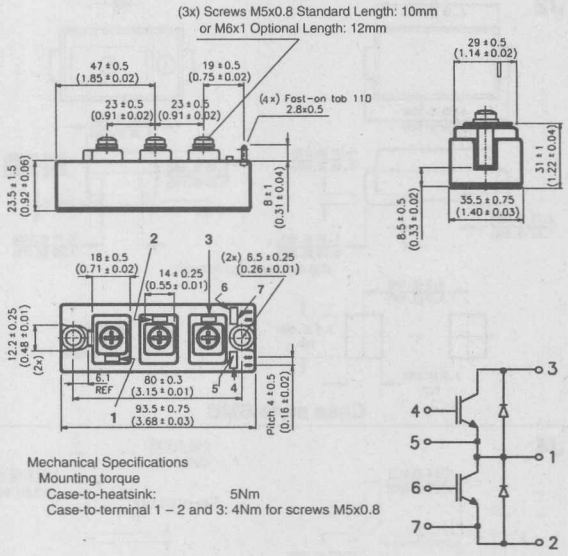
IG10



Mechanical Specifications
Mounting torque
Case-to-heatsink: 3Nm min; 4Nm max
Case-to-terminal 1 – 2 and 3: 2.5Nm min; 3Nm max

Case style INT-A-Pak (old half bridge)

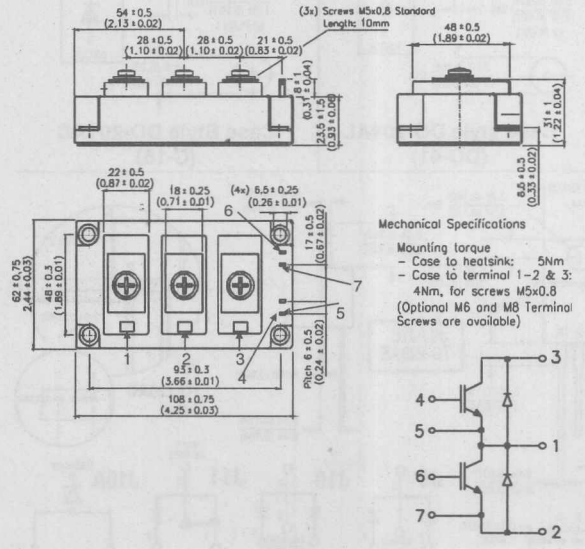
IG11



Mechanical Specifications
Mounting torque
Case-to-heatsink: 5Nm
Case-to-terminal 1 – 2 and 3: 4Nm for screws M5x0.8

Case style INT-A-Pak (new half bridge)

IG12

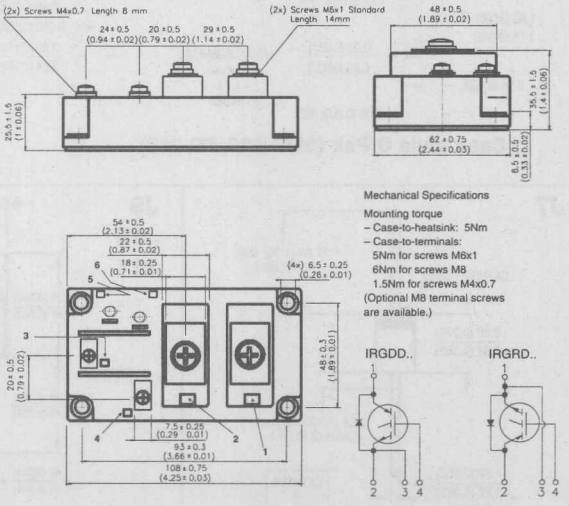


Mechanical Specifications
Mounting torque
- Case to heatsink: 5Nm
- Case to terminal 1–2 & 3: 4Nm, for screws M5x0.8

(Optional M6 and M8 Terminal Screws are available)

Case style Double INT-A-Pak (new half bridge)

IG13

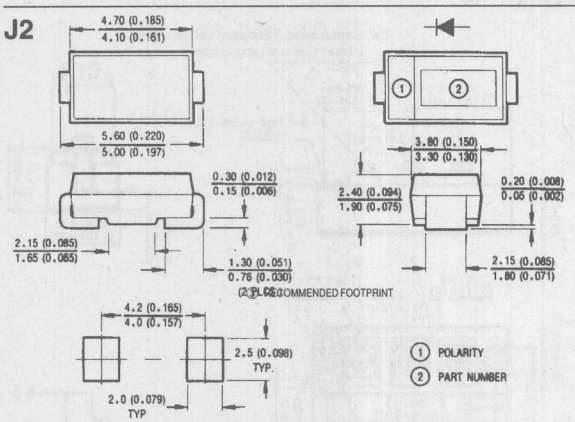


Mechanical Specifications
Mounting torque
– Case-to-heatsink: 5Nm
– Case-to-terminals:
5Nm for screws M6x1
6Nm for screws M8
1.5Nm for screws M4x0.7
(Optional M8 terminal screws are available.)

Case style Double INT-A-Pak (single switch diode single switch complementary diode)

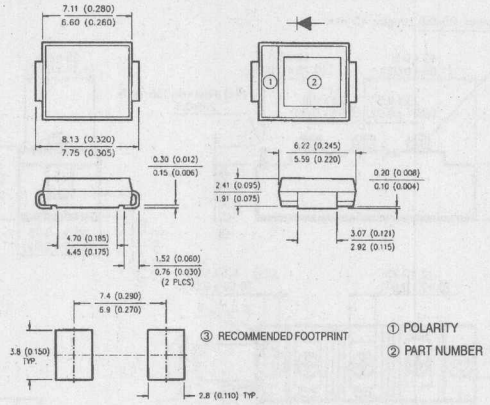
UltraFast™ Recovery, HEXFRED and Schottky Diodes

J2



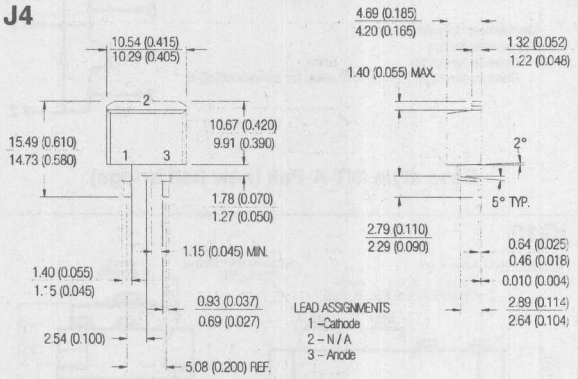
Case style SMB

J3



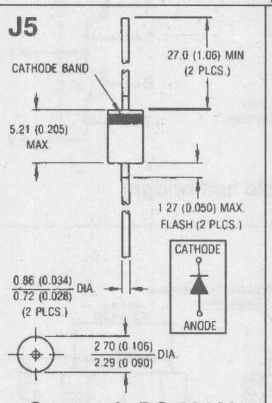
Case style SMC

J4



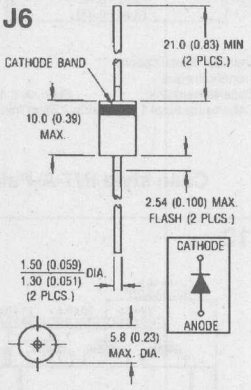
Case style D²Pak (SMD-220, TO-263)

J5



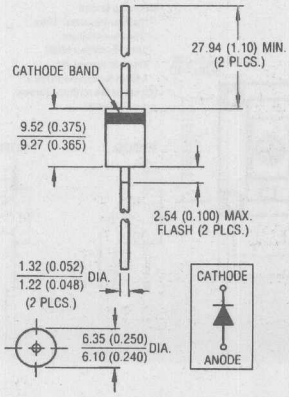
Case style DO-204AL (DO-41)

J6



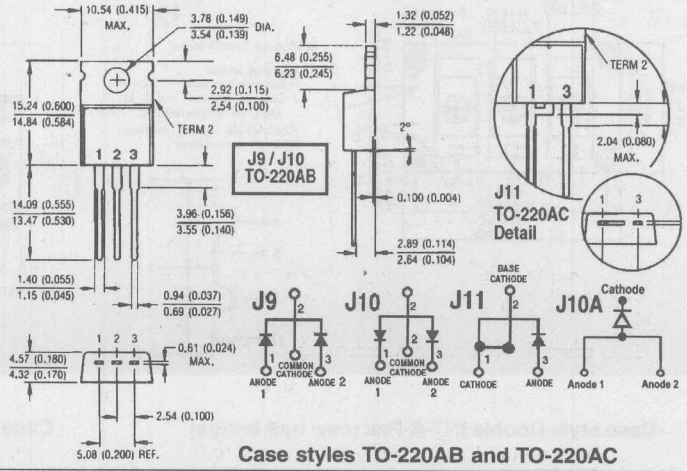
Case Style DO-201AD (C-16)

J7



Case style DO-204AR

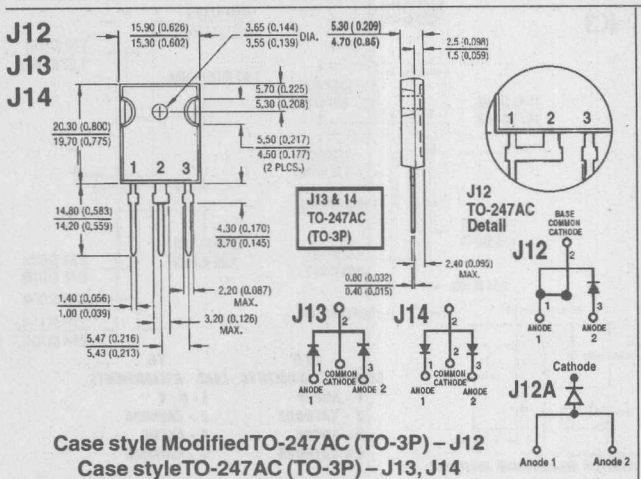
J9 J10 J11



Case styles TO-220AB and TO-220AC

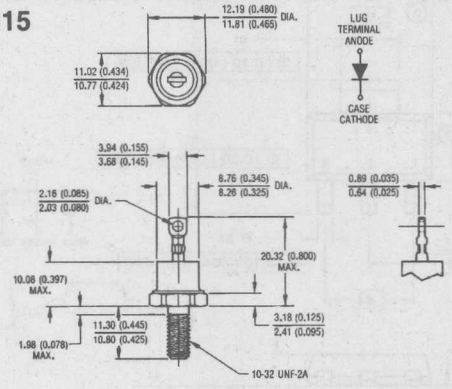
HEXFRED™ and Schottky Diodes

J12
J13
J14



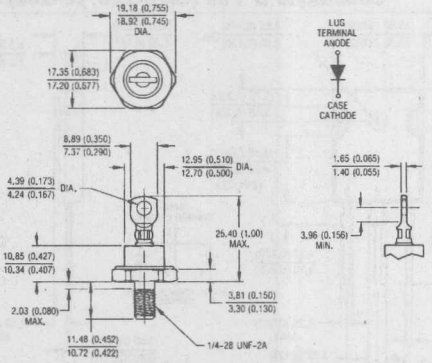
Case style ModifiedTO-247AC (TO-3P) – J12
Case styleTO-247AC (TO-3P) – J13, J14

J15



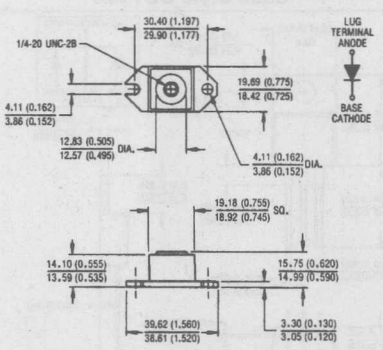
Case style DO-203AA (DO-4)

J16



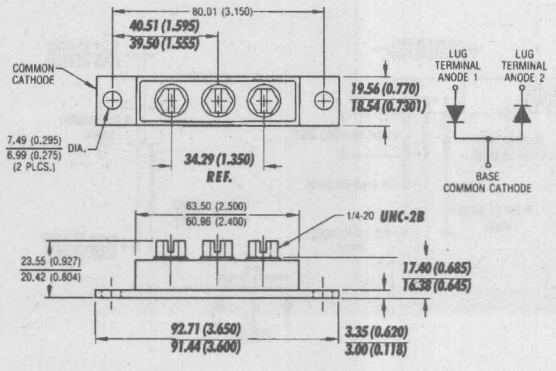
Case style DO-203AB (DO-5)

J17



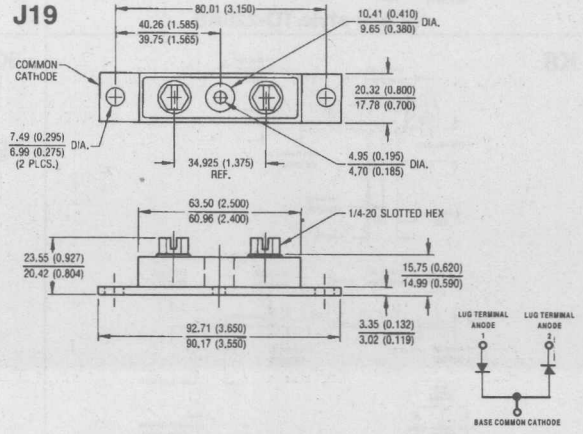
Case style Half Pak Module

J18



Case style Modified TO-244AB Isolated

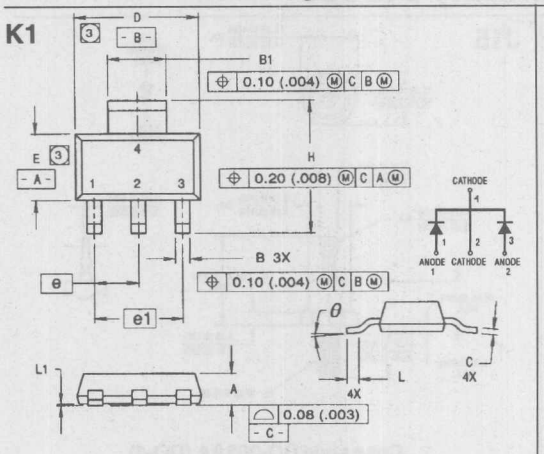
J19



Case style Modified TO-244AB Non-Isolated

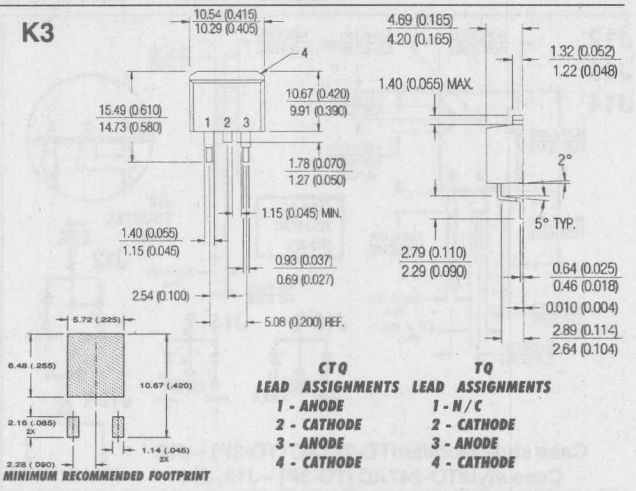
Schottky Diode / HEXFRED™ Center Tap Devices

K1



Case style SOT-223

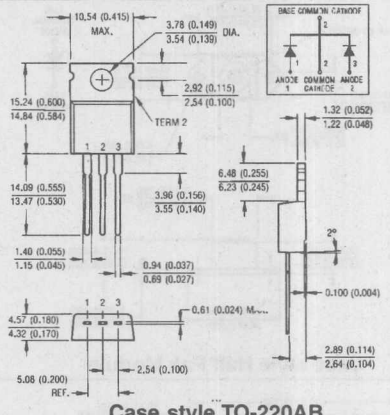
K3



CTQ		TQ	
LEAD	ASSIGNMENTS	LEAD	ASSIGNMENTS
1	ANODE	1	N/C
2	CATHODE	2	CATHODE
3	ANODE	3	ANODE
4	CATHODE	4	CATHODE

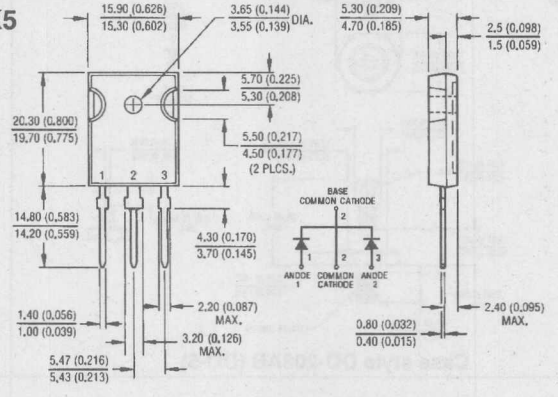
Case style D²Pak (SMD-220, TO-263)

K4



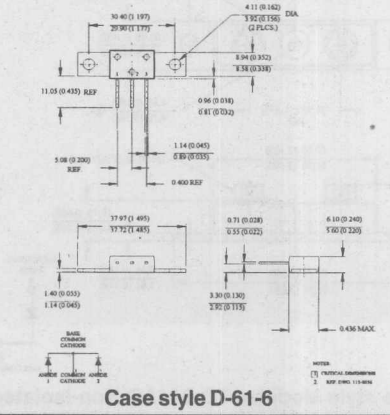
Case style TO-220AB

K5



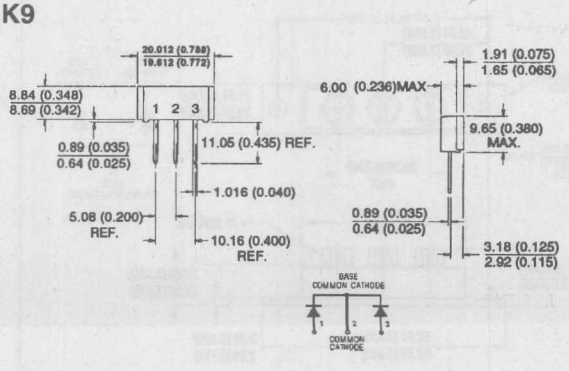
Case style TO-247AC (TO-3P)

K8



Case style D-61-6

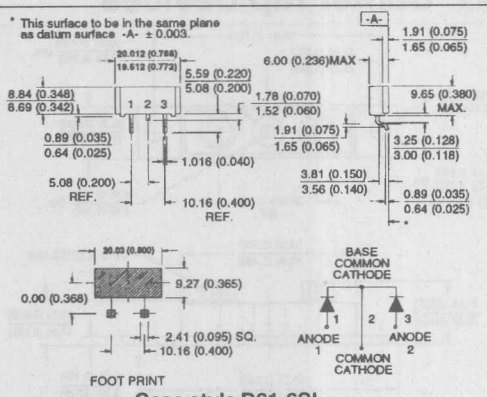
K9



Case style D61-6SM

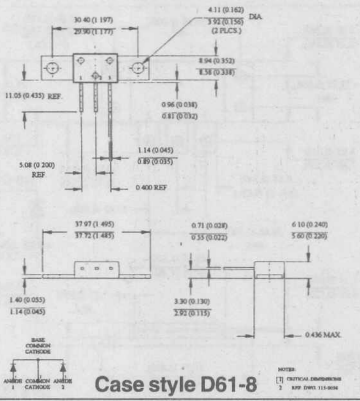
Schottky Diode/ HEXFRED™ Center Tap Devices

K10



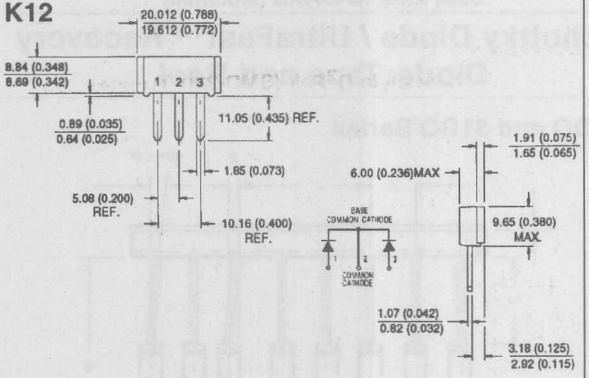
Case style D61-6SL

K11



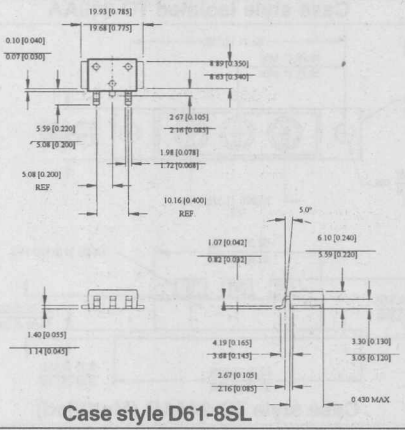
Case style D61-8

K12



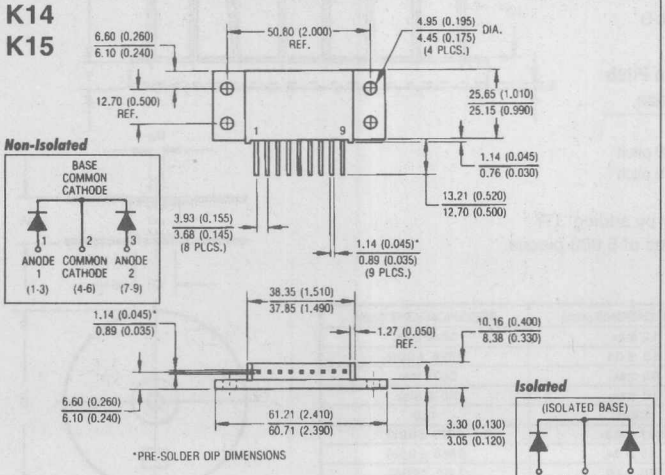
Case style D61-8SM

K13



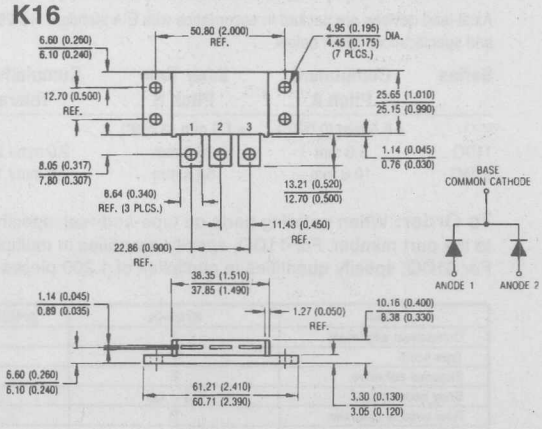
Case style D61-8SL

K14
K15



Case style D-60
Case style Isolated D-60

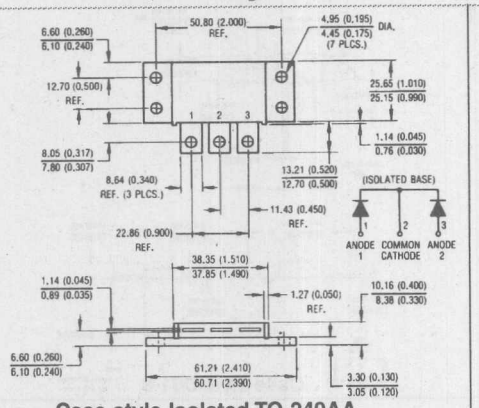
K16



Case style TO-249AA

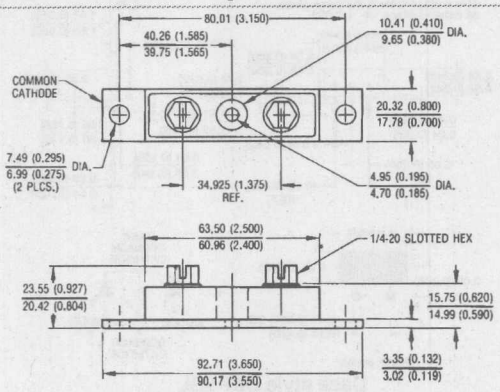
Schottky Diode/ HEXFRED™ Center Tap Devices

K17



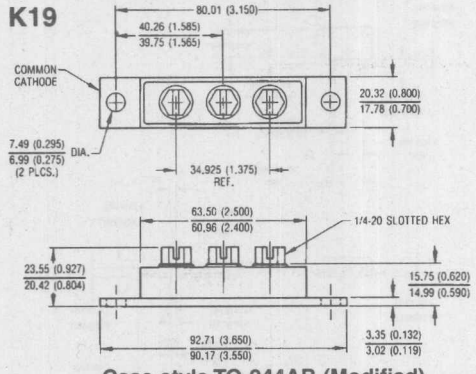
Case style Isolated TO-249AA

K18



Case style TO-244AB (Modified)

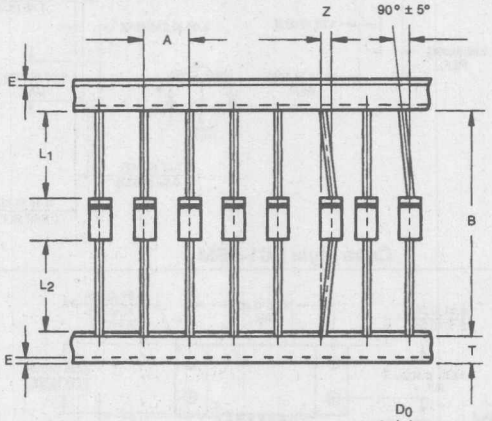
K19



Case style TO-244AB (Modified)

Schottky Diode / UltraFast™ Recovery Diode: Tape and Reel

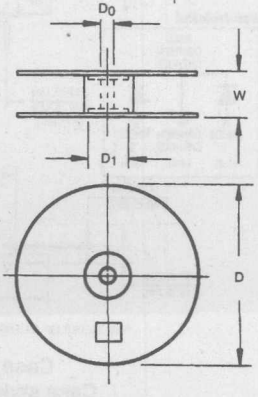
11DQ and 31DQ Series



Axial-lead devices are packed in accordance with EIA standard RS-296-D and specifications given below.

Series	Component Pitch A	Inner Tape Pitch B	Cumulative Pitch Tolerance
	± 0.5 mm (0.020")	± 1.5 mm (0.059")	
11DQ	5.0 mm	26.0 mm	2.0 mm / 20 pitch
31DQ	10.0 mm	52.4 mm	2.0 mm / 10 pitch

To Order: When ordering parts on tape-and-reel, specify by adding 'TR' to the part number. For 11DQ, specify quantities in multiples of 5,000 pieces. For 31DQ, specify quantities in multiplies of 1,200 pieces.



ITEM	SYMBOL	SPECIFICATIONS (mm)	SPECIFICATIONS (inch)
Component alignment	Z	1.2 max.	0.048 max.
Tape width	T	6.0 ±0.4	0.236 ±0.016
Exposed adhesive	E	0.8 max.	0.032 max.
Body eccentricity	$\|L_1 - L_2\|$	1.0 max.	0.040 max.
Reel outside diameter	D	330.0	13.0
Reel inner diameter	D_1	85.7 ±0.3	3.375 ±0.012
Feed hole diameter	D_0	16.8 ±0.4	0.655 ±0.016
Reel width	W	79.0 ±1.0	3.110 ±0.040

NOTE: 1. Each component lead shall be sandwiched between tapes for a minimum of 3.2 mm (0.126").
2. The reel width 'W' for 26 mm taping is 50.0 ±1.0 mm (1.97" ± 0.040")

Schottky Diode / UltraFast™ Recovery Diode: Tape and Reel

SMB

IDENTIFICATION

MARKING and IDENTIFICATION

EACH DEVICE HAS 4 CHARACTERS, CONFIGURED TWO DIGITS ON TWO ROWS, FOR IDENTIFICATION. THE FIRST ROW DESIGNATES THE DEVICE AS MANUFACTURED BY INTERNATIONAL RECTIFIER AS INDICATED BY THE LETTERS "IR". THE SECOND ROW INDICATES THE CURRENT RATING AND VOLTAGE/PROCESS. SEE THE DRAWING BELOW FOR MARKING CODE.

FIRST ROW
IR

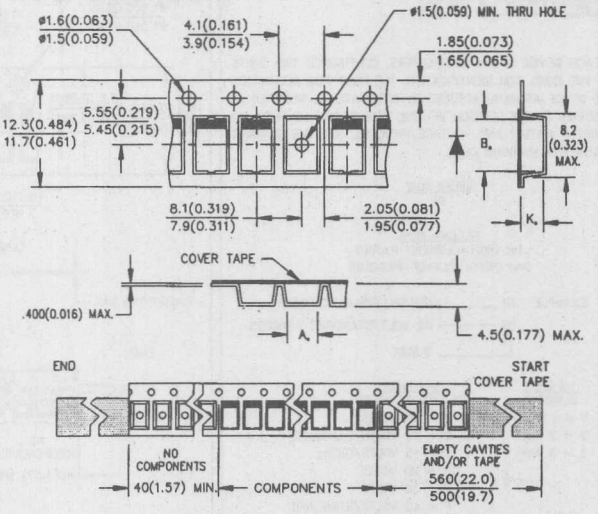
SECOND ROW
1st DIGIT=CURRENT RATING
2nd DIGIT=VOLTAGE/PROCESS

EXAMPLE: IR ——— INTERNATIONAL RECTIFIER
1F ——— 40 VOLT/STANDARD PROCESS
1 AMP

1st DIGIT CURRENT	2nd DIGIT VOLTAGE/PROCESS
1 = 1 AMP	A = 12 VOLTS
2 = 2 AMP	B = 15 VOLTS/STANDARD
3 = 3 AMP	C = 15 VOLTS/OR'ing
	D = 20 VOLTS
	E = 30 VOLTS
	F = 40 VOLTS/STANDARD
	G = 40 VOLTS/'830'
	H = 60 VOLTS
	J = 100 VOLTS
	K = 150 VOLTS
	L = 200 VOLTS

PACKAGING

TAPE DIMENSIONS



NOTE: A., B., K. ARE DETERMINED BY COMPONENT SIZE. THE CLEARANCE BETWEEN THE COMPONENT AND THE CAVITY SHALL BE WITHIN .05(.002) MIN. TO .65(.026) MAX. THE COMPONENT SHALL NOT ROTATE MORE THAN 20° WITHIN THE DETERMINED CAVITY.

ORDERING INFORMATION

10BQ SERIES-TAPE AND REEL

WHEN ORDERING, INDICATE THE PART NUMBER AND THE QUANTITY (IN MULTIPLES OF 3000 PIECES).

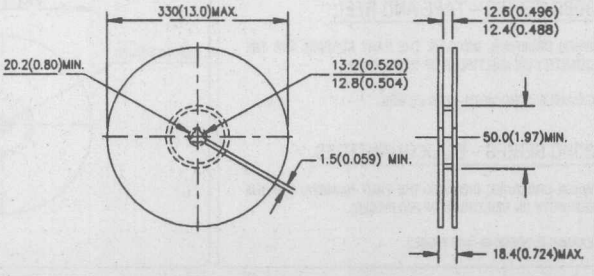
EXAMPLE: 10BQ040TR-6000 PIECES.

10BQ SERIES-BULK QUANTITIES

WHEN ORDERING, INDICATE THE PART NUMBER AND THE QUANTITY (IN MULTIPLES OF 250 PIECES).

EXAMPLE: 10BQ040-500 PIECES.

REEL DIMENSIONS



Conforms to EIA-481-Rev. A

Schottky Diode / UltraFast™ Recovery Diode: Tape and Reel

SMC

IDENTIFICATION

MARKING and IDENTIFICATION

EACH DEVICE HAS 4 CHARACTERS, CONFIGURED TWO DIGITS ON TWO ROWS, FOR IDENTIFICATION. THE FIRST ROW DESIGNATES THE DEVICE AS MANUFACTURED BY INTERNATIONAL RECTIFIER AS INDICATED BY THE LETTERS "IR". THE SECOND ROW INDICATES THE CURRENT RATING AND VOLTAGE/PROCESS. SEE THE DRAWING BELOW FOR MARKING CODE.

FIRST ROW
IR

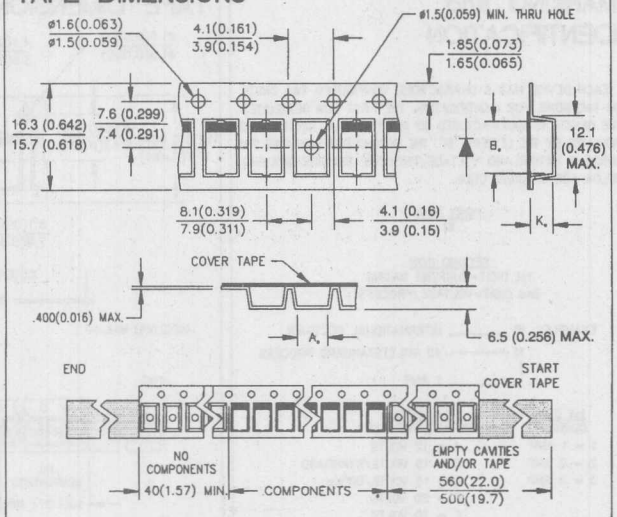
SECOND ROW
1st DIGIT=CURRENT RATING
2nd DIGIT=VOLTAGE/PROCESS

EXAMPLE: IR ——— INTERNATIONAL RECTIFIER
3F ——— 40 VOLT/STANDARD PROCESS
└——— 3 AMP

1st DIGIT CURRENT	2nd DIGIT VOLTAGE/PROCESS
1 = 1 AMP	A = 12 VOLTS
2 = 2 AMP	B = 15 VOLTS/STANDARD
3 = 3 AMP	C = 15 VOLTS/OR'ing
	D = 20 VOLTS
	E = 30 VOLTS
	F = 40 VOLTS/STANDARD
	G = 40 VOLTS/'830'
	H = 60 VOLTS
	J = 100 VOLTS
	K = 150 VOLTS
	L = 200 VOLTS

PACKAGING

TAPE DIMENSIONS



NOTE: A., B., K. ARE DETERMINED BY COMPONENT SIZE. THE CLEARANCE BETWEEN THE COMPONENT AND THE CAVITY SHALL BE WITHIN .05(.002) MIN. TO .65(.026) MAX. THE COMPONENT SHALL NOT ROTATE MORE THAN 20° WITHIN THE DETERMINED CAVITY.

ORDERING INFORMATION

30BQ SERIES – TAPE AND REEL

WHEN ORDERING, INDICATE THE PART NUMBER AND THE QUANTITY (IN MULTIPLES OF 1500 PIECES).

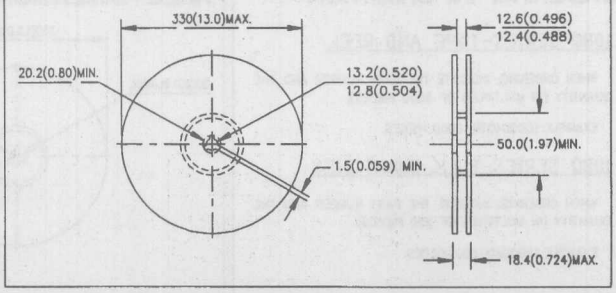
EXAMPLE: 30BQ040TR–6000 PIECES.

30BQ SERIES – BULK QUANTITIES

WHEN ORDERING, INDICATE THE PART NUMBER AND THE QUANTITY (IN MULTIPLES OF 200 PIECES).

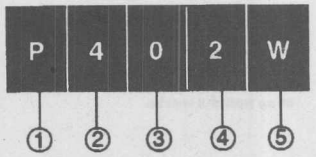
EXAMPLE: 30BQ040–400 PIECES.

REEL DIMENSIONS



Conforms to EIA-481-Rev. A

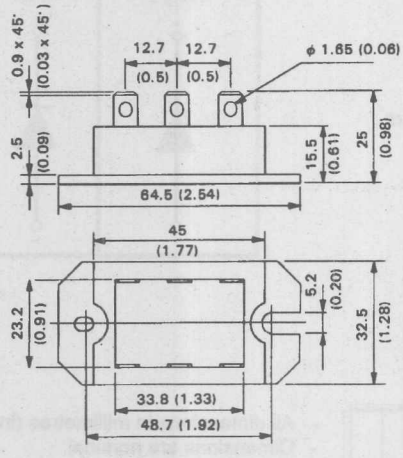
M1 – Pace-Pak



Part number coding

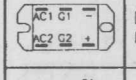
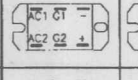
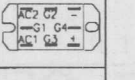
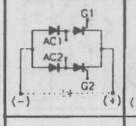
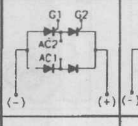
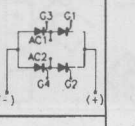
1 - Module type
2 - Current rating:
1 = 25A DC (P100 series)
4 = 40A DC (P400 series)
3 - Circuit configuration (0, 2, 3)
4 - Voltage code (See Table)
5 - W = Optional free-wheeling diode

VRRM	
1 =	400V
2 =	600V
3 =	800V
4 =	1000V
5 =	1200V



- All dimensions in millimeters (inches)
- Dimensions are nominal
- Full engineering drawings are available on request

Circuit Type and Coding

Circuit "0"	Circuit "2"	Circuit "3"
		
		
Single Phase Hybrid Bridge Common Cathode	Single Phase Hybrid Bridge Doubler connection	Single Phase All SCR Bridge

M3 – T-Module

T	85	HF	L	80	S05
①	②	③	④	⑤	⑥

Part number coding

- May contain beryllium oxide ceramic, and under normal circumstances is non hazardous.
- Do not open, cut or grind.
- Unserviceable parts must be disposed of as harmful waste.

1 - Module type

2 - Current ratings : Standard and Fast Recovery diodes
- 40 = 40A (Avg)
- 70 = 70A (Avg)
- 85 = 85A (Avg)
- 110 = 110A (Avg) (Only Standard Recovery)

: Thyristors
- 50 = 50A (Avg)
- 70 = 70A (Avg)
- 90 = 90A (Avg)

3 - Circuit configuration:
- HF = for diodes
- RIA = for thyristors

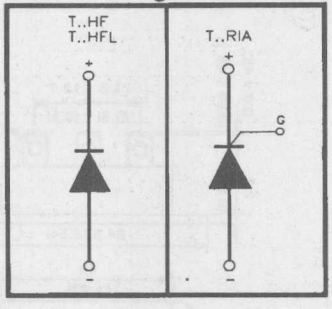
(See Circuit Configuration Table).

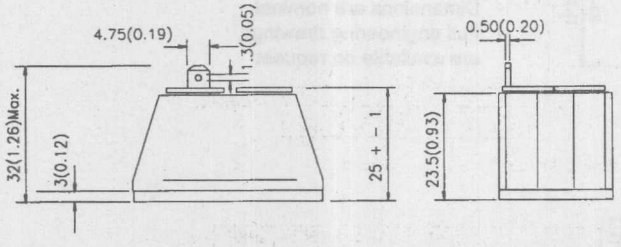
4 - No letter = for standard recovery diodes and thyristors
L = only for fast diodes

5 - Voltage code : Code x 10 = VRRM

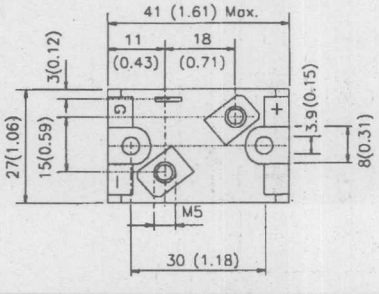
6 - trr code (only for fast diodes):
- S02 = 200 ns
- S05 = 500 ns

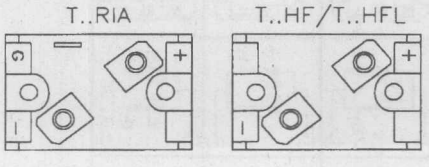
Circuit Configuration Table





- All dimensions in millimetres (inches)
- Dimensions are nominal
- Full engineering drawings are available on request





M4 – ADD-A-Pak

IRK	D		56	/	10		Part Number coding
①	②	③	④		⑤	⑥	

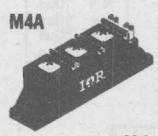
1 - Module type
2 - Circuit Configuration (See Circuit Configuration Table)

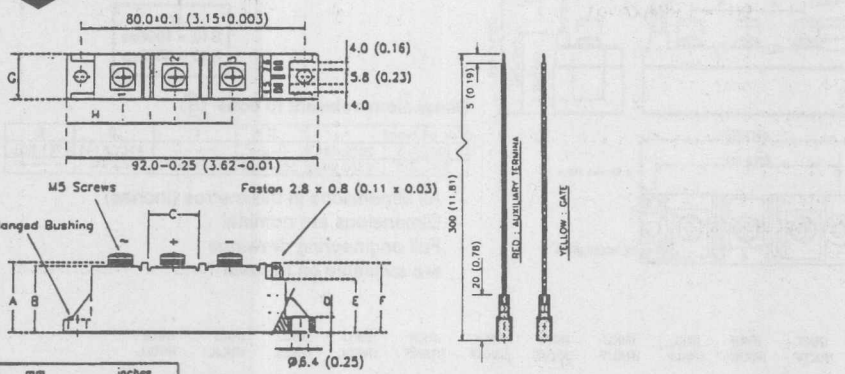
4 - Current rating * : IT(AV) = code value with last digit rounded off "0" or "5"
5 - Voltage code : Code x 100 = VRRM

6 - No code = Standard recovery (diodes) dv/dt = 500V/µs (thyristors)
Code = trr (fast diodes) dv/dt (thyristors)
S90= 1000 V/µs (thyristors)

*With auxiliary cathode last digit = "1" or "6"
For no auxiliary cathode last digit = "2" or "7"

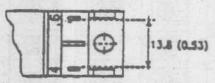
M4A





	mm	inches
A	30.0 ± 0.30	(1.18 ± 0.012)
B	29.0 ± 0.20	(1.14 ± 0.007)
C	18.0 ± 0.20	(0.71 ± 0.007)
D	05.8 ± 0.20	(0.23 ± 0.007)
E	24.0 ± 0.10	(0.94 ± 0.003)
F	30.0 – 1	(1.18 – 0.040)
G	20.5 ± 0.10	(0.81 ± 0.003)
H	21.0 ± 0.10	(0.83 ± 0.003)
I	20.0 ± 0.05	(0.79 ± 0.019)

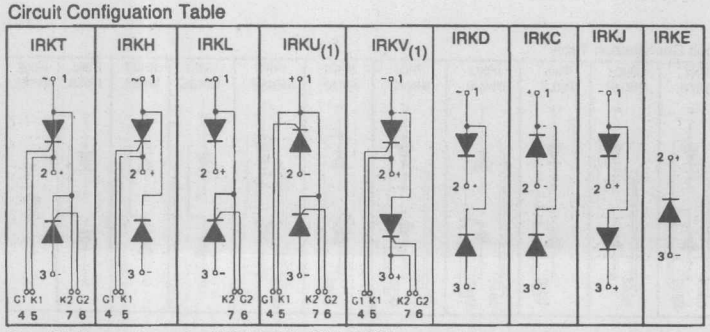
no auxiliary cathode



A	B	C	D	E	** ±0.4(0.015)
0.8 (0.03)	4 (0.15)	5.8 (0.22)	Min. 7.7 (0.30)	10 (0.39)	

All dimensions in millimeters (inches)

Circuit Configuation Table



Note (1). For configuration IRKU, IRKV, IRKK, IRKN contact factory.

M5 – INT-A-Pak

IRK	T	F	15	2	-	08	H	J	N
①	②	③	④	⑤		⑥	⑦	⑧	⑨

Part number coding

- Standard parts contain beryllium oxide substrate, and under normal circumstances is non hazardous.
- Do not open, cut or grind.
- Unserviceable parts must be disposed of as harmful waste.

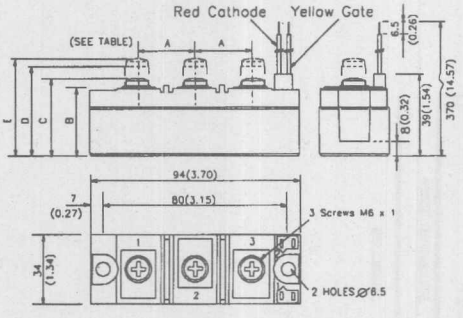
1 - Module type
2 - Circuit configuration (See Circuit Configuration Table)
3 - No letter = standard recovery
F = Fast SCR
L = Fast recovery diode
4 - Current rating : Code x 10 = IT(AV)
5 - 1 & 5 = option with spacers and longer terminal screws
2 & 6 = option with standard terminal screws
6 - Voltage code: Code x 100 = VRRM

7 - Fast diode : trr code
Fast thyristor : dynamic dv/dt code
8 - Fast thyristor : tq code
9 - No letter = Beryllium Oxide ceramic substrate
N = Aluminum Nitride substrate

dv/dt
H = 400V/µs

tq
N = 10µs
L = 15µs
K = 20µs
J = 25µs

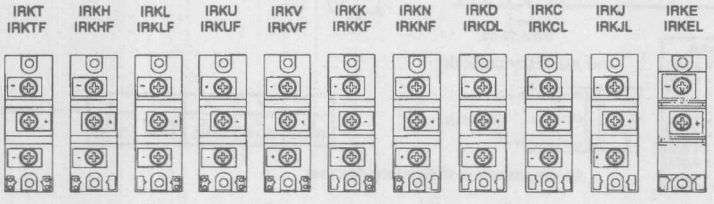
trr
S10 = 1000ns
S20 = 2000ns



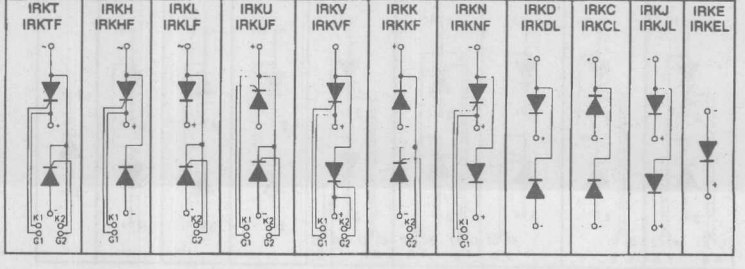
Dimensions relevant to code ⑤

For all types	A	B	C	D	E
IRK...1, 5	25(0.984)	----	----	41(1.614)	47(1.85)
IRK...2, 6	23(0.906)	30(1.18)	36(1.417)	----	----

- All dimensions in millimetres (inches)
- Dimensions are nominal
- Full engineering drawings are available on request



Circuit Configuation Table



M6 – MAGN-A-Pak

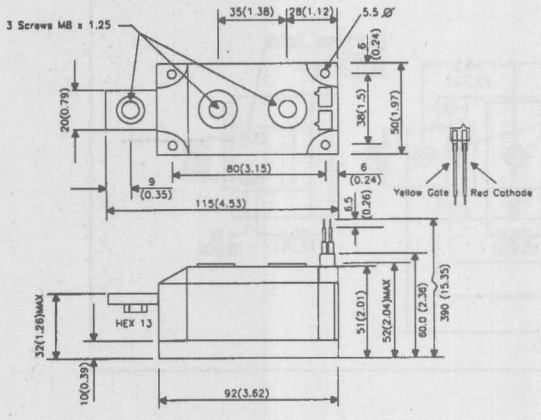
IRK	T	F	200	-	08	H	J	N
①	②	③	④		⑤	⑥	⑦	⑧

Part number coding

- Standard parts contain beryllium oxide substrate, and under normal circumstances is non hazardous.
- Do not open, cut or grind.
- Unserviceable parts must be disposed of as harmful waste.

1 - Module type
2 - Circuit configuration (See Circuit Configuration Table)
3 - No letter = standard recovery
F = Fast SCR
L = Fast recovery diode

4 - Current rating : IT (AV)
5 - Voltage code : Code x 100 = VRRM
6 - Fast diode : trr code
Fast thyristor : dynamic dv/dt code
7 - Fast thyristor : tq code
8 - No letter = Beryllium Oxide ceramic substrate
N = Aluminum Nitride substrate

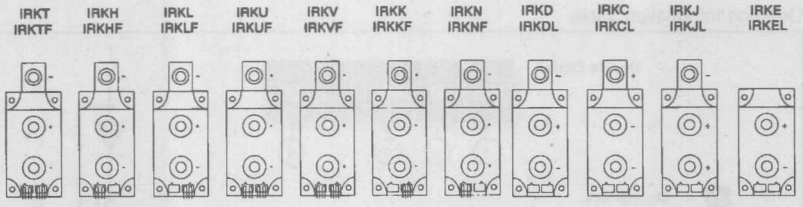


dv/dt
H = 400V/µs

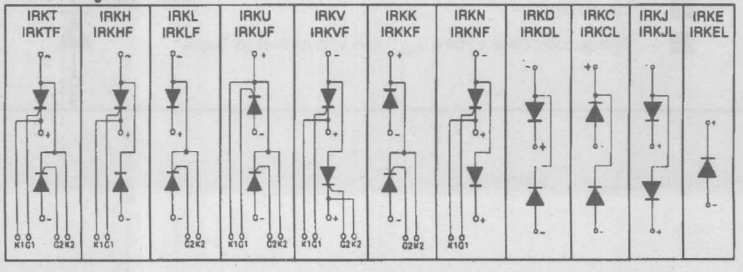
tq
N = 10µs
L = 15µs
K = 20µs
J = 25µs

trr
S10 = 1000ns
S20 = 2000ns

- All dimensions in millimetres (inches)
- Dimensions are nominal
- Full engineering drawings are available on request

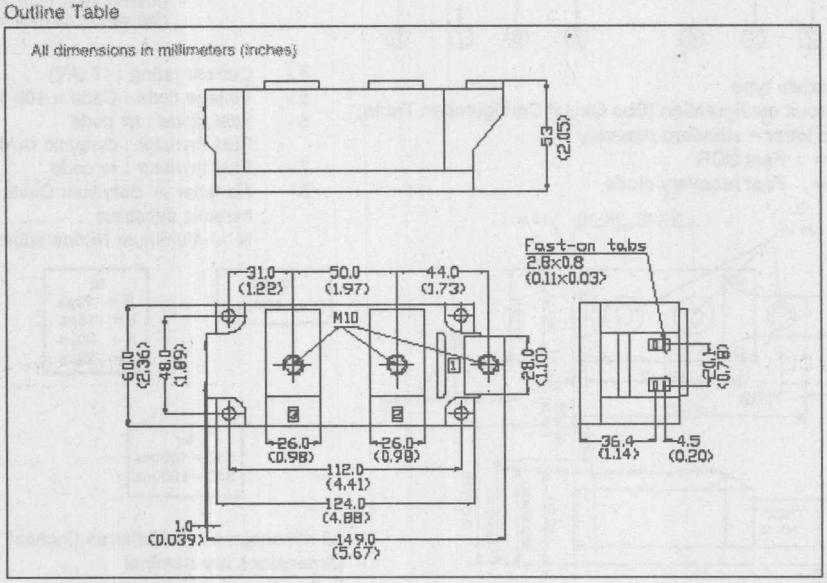


Circuit Configuation Table

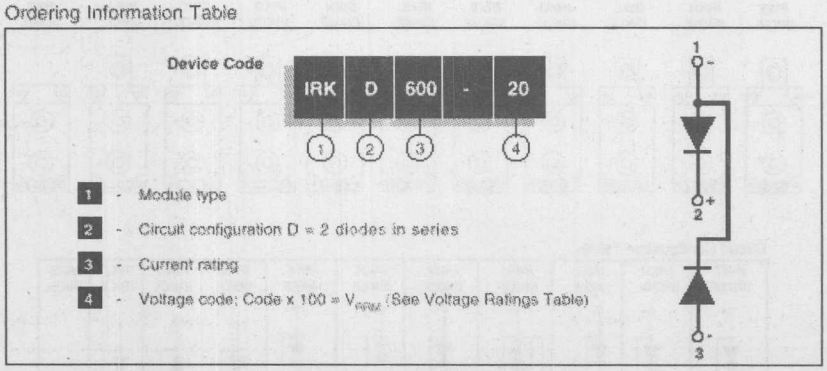


M7 – Super MAGN-A-Pak

Outline Table

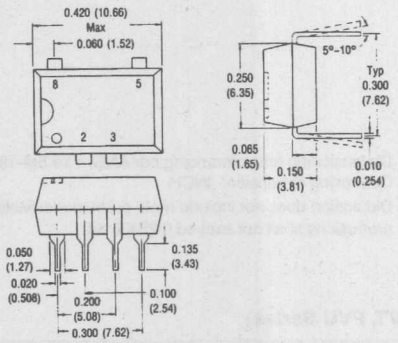


Ordering Information Table



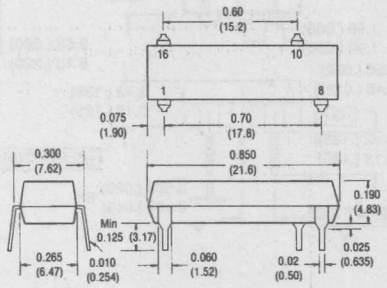
Microelectronic Relays

MR1



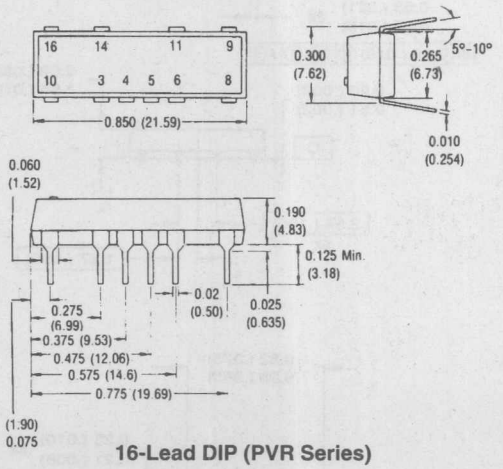
8-Lead DIP (CS, PVA, PVD, PVI Series)

MR2



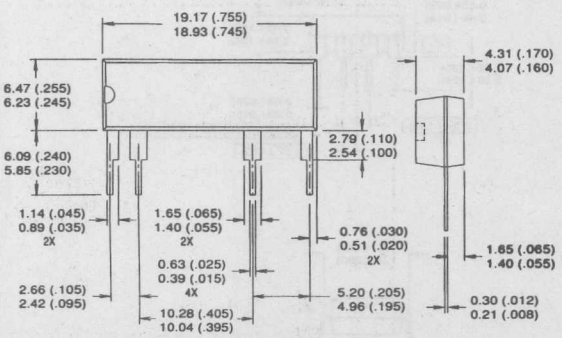
16-Lead DIP (DPA Series)

MR3



16-Lead DIP (PVR Series)

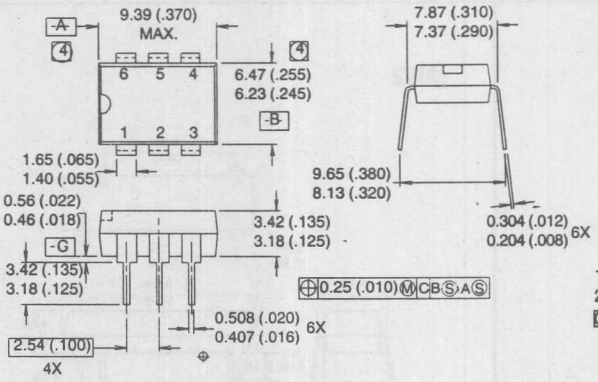
MR5



8-Lead SIP (SPA Series)

Microelectronic Relays

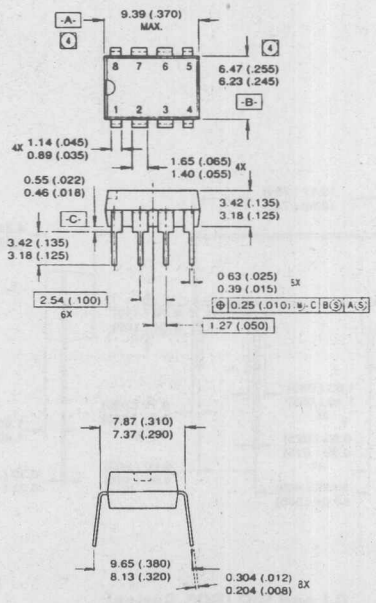
MR6



1. Dimensioning and tolerancing per ANSI Y14.5M-1982
2. Controlling dimension: INCH
4. Dimension does not include mold protrusions. Mold protrusions shall not exceed 0.25 (.010).

6-Lead DIP, single-Pole (PVG, PVN, PVT, PVU Series)

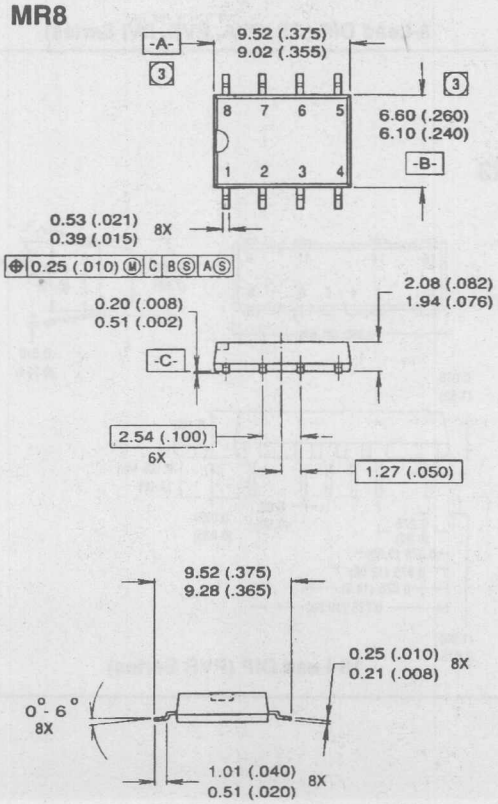
MR7



1. Dimensioning and tolerancing per ANSI Y14.5M-1982
2. Controlling dimension: INCH
4. Dimension does not include mold protrusions. Mold protrusions shall not exceed 0.25 (.010).

8-Lead DIP, Dual-Pole (PVT422)

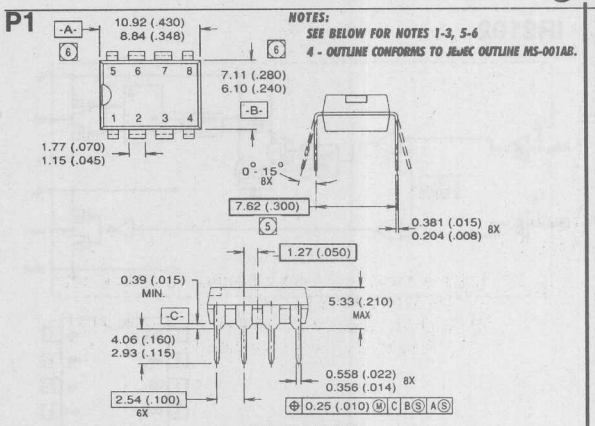
MR8



PVO Series 'Thin-Pak'

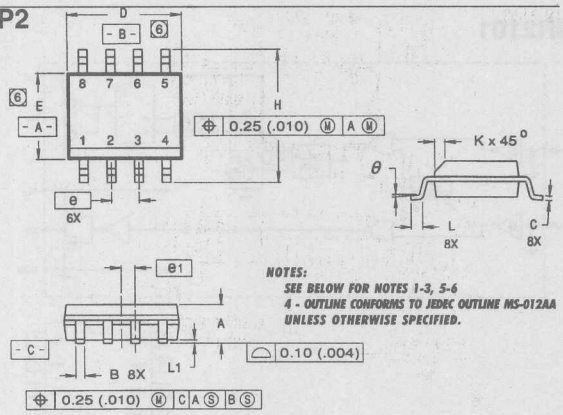
Control Integrated Circuits[7]

P1



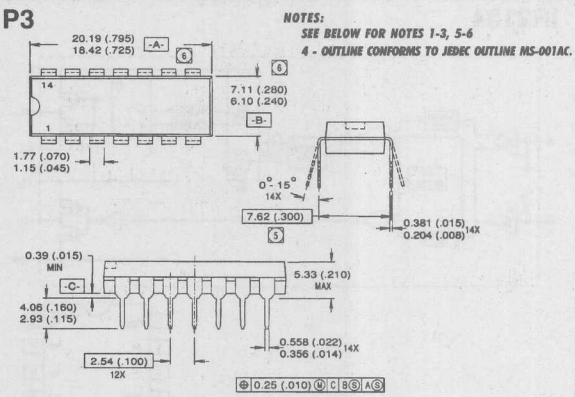
8-Lead DIP

P2



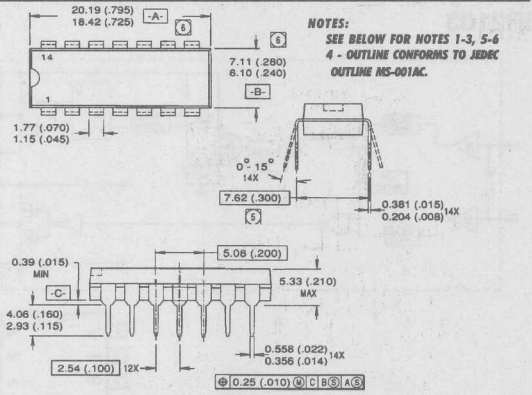
8-Lead SOIC

P3



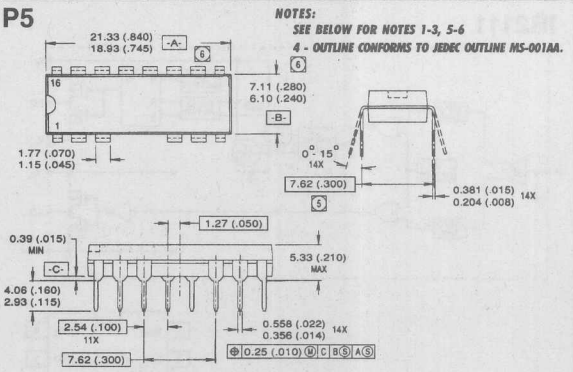
14-Lead DIP

P4



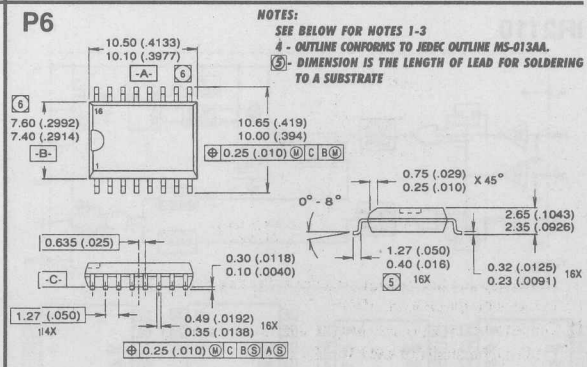
14-Lead DIP without Lead 4

P5



16-Lead DIP without Leads 4 and 5

P6



16-Lead SOIC, Wide Body

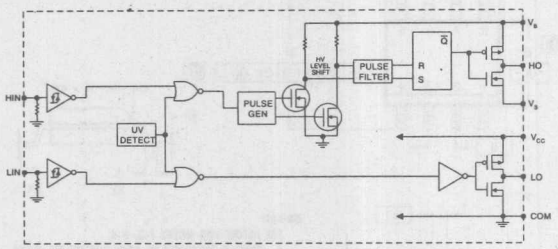
NOTES:

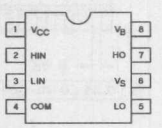
1 - DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2 - CONTROLLING DIMENSION: INCH.
3 - DIMENSIONS ARE SHOWN IN MILLIMETERS (INCHES).

5 MEASURED WITH THE LEADS CONSTRAINED TO BE PERPENDICULAR TO DATUM PLANE C.
6 DIMENSION DOES NOT INCLUDE MOLD PROTRUSIONS, WHICH SHALL NOT EXCEED 0.25 (0.010).
7 - FOR BLOCK DIAGRAMS AND LEAD ASSIGNMENTS, SEE PAGES N-37 THROUGH N-43.

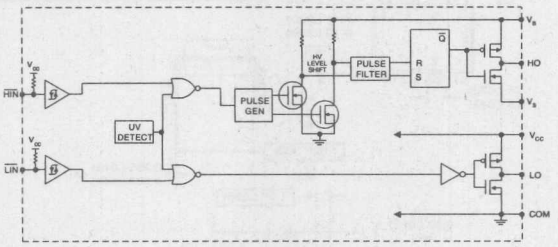
Control Integrated Circuits

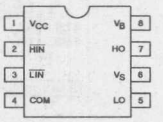
IR2101



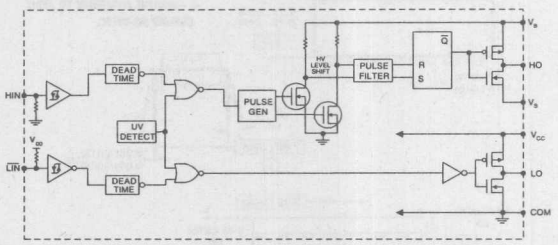


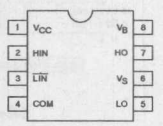
IR2102



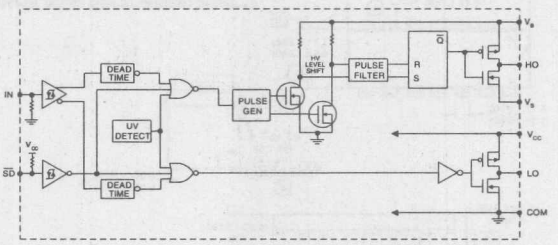


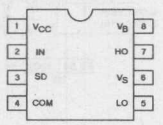
IR2103



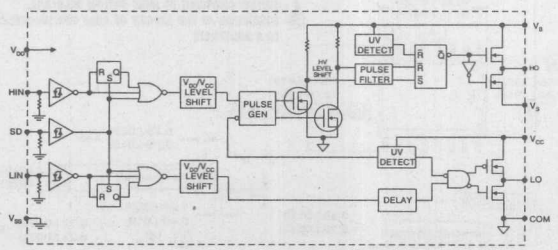


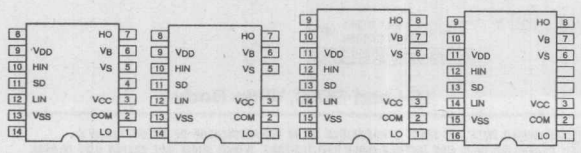
IR2104



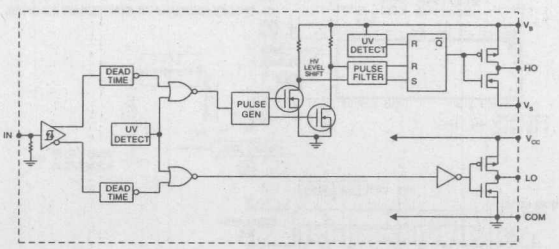


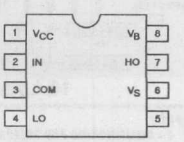
IR2110





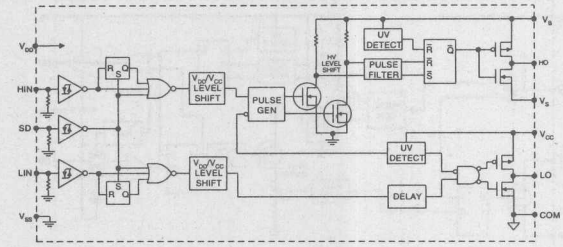
IR2111

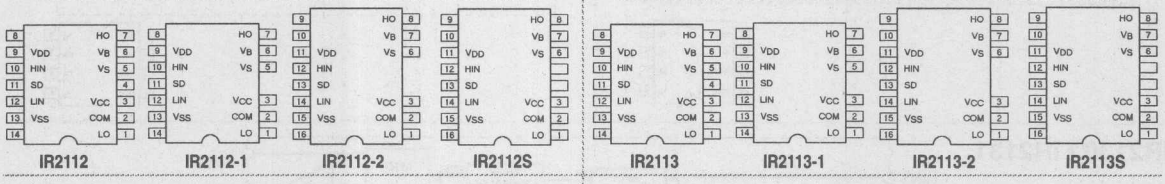




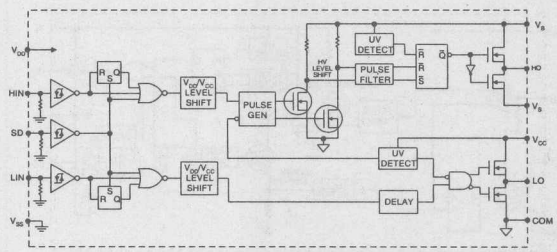
Control Integrated Circuits

IR2112

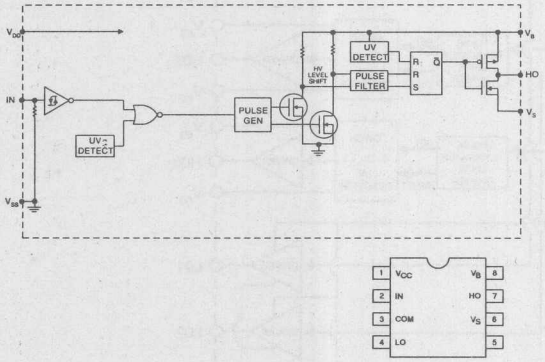




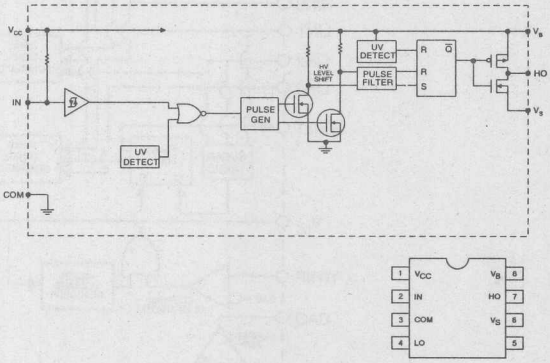
IR2113



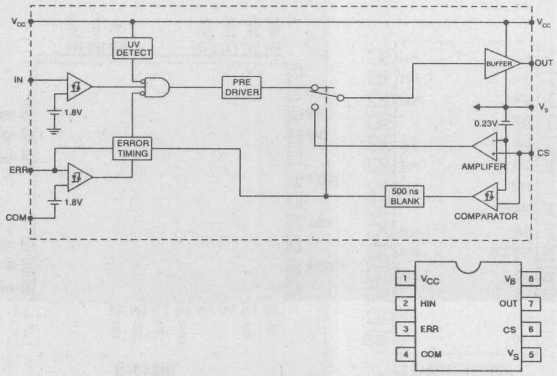
IR2117



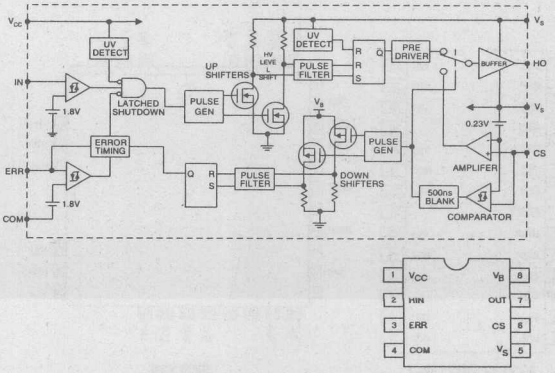
IR2118



IR2121

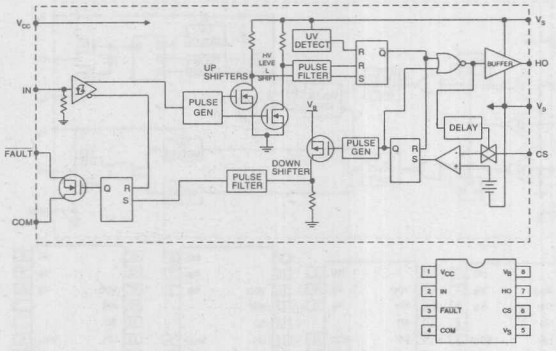


IR2125

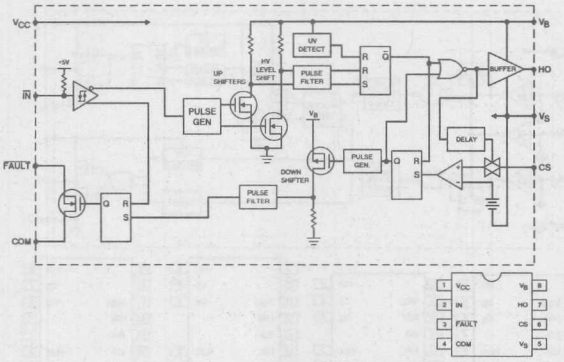


Control Integrated Circuits

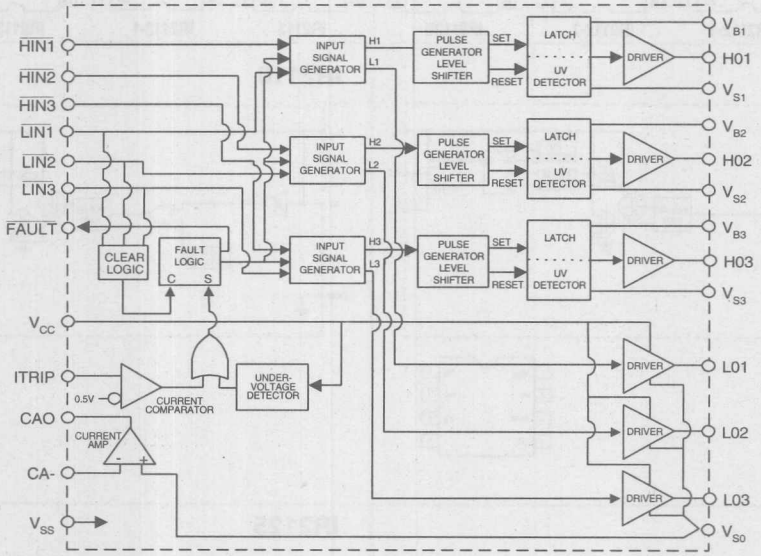
IR2127



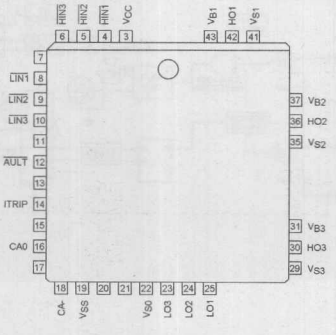
IR2128



IR2130 / IR2131

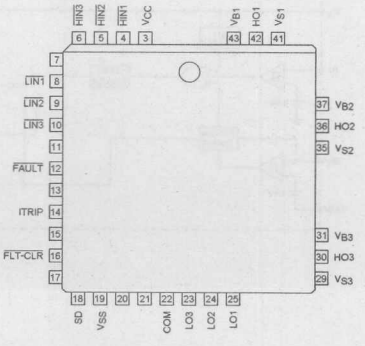


IR2130 / IR2130-J



IR2130S

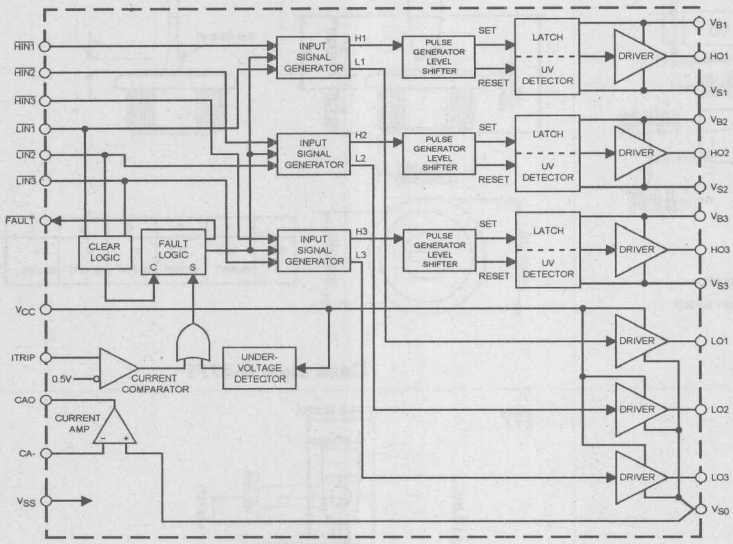
IR2131 / IR2131J

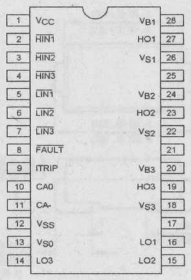


IR2131S

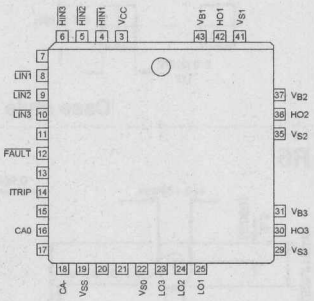
Control Integrated Circuits

IR2132



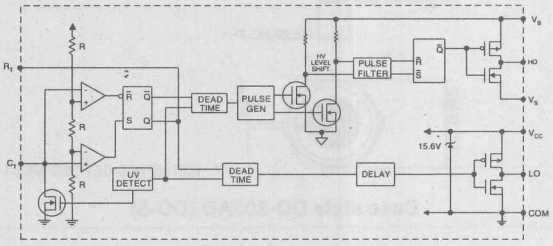


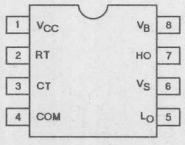
IR2132



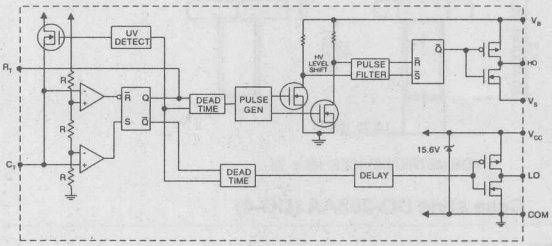
IR2132S

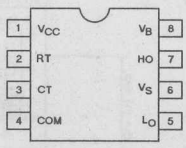
IR2151



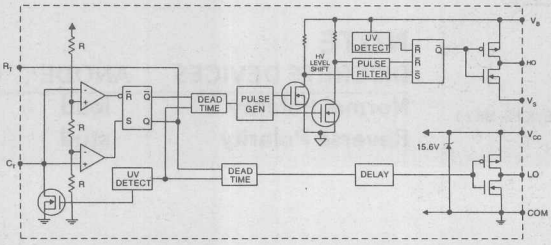


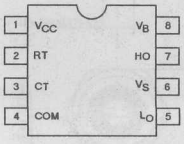
IR2152





IR2155

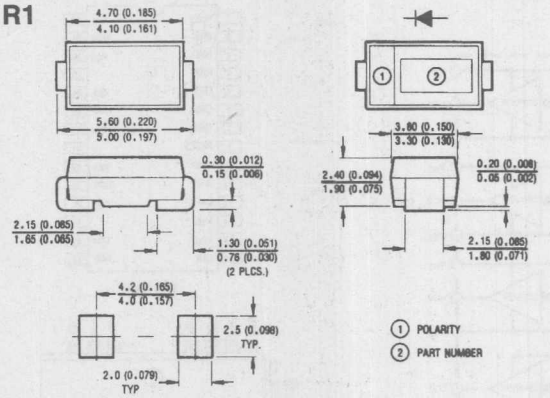




Diodes

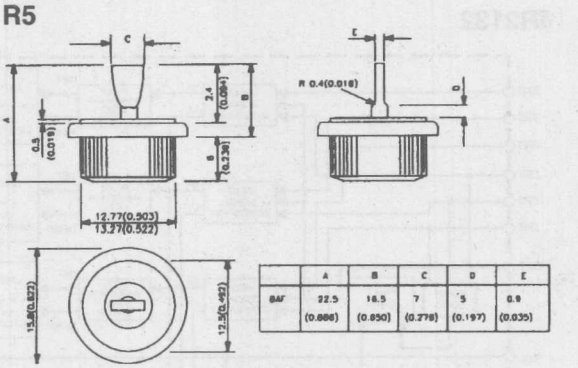
ALL DIMENSIONS IN MILLIMETERS (INCHES)

R1



Case style SMB

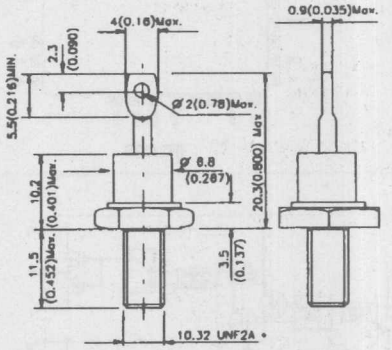
R5



	A	B	C	D	E
BAF	22.5 (0.886)	16.5 (0.650)	7 (0.276)	5 (0.197)	0.9 (0.035)

Case style B-47PP

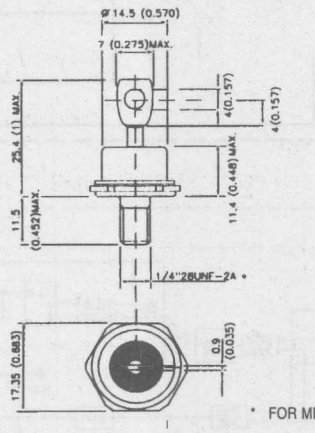
R6



* FOR METRIC DEVICES: M5 x .75

Case style DO-203AA (DO-4)

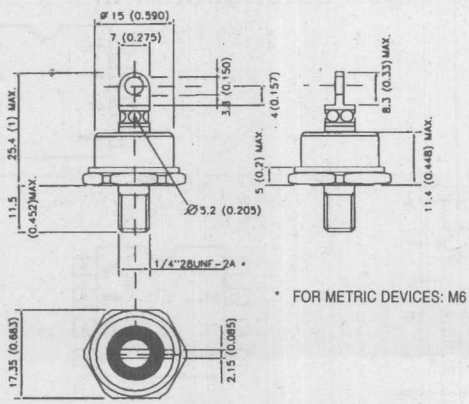
R7



* FOR METRIC DEVICES: M6 x 1

Case style DO-203AB (DO-5)

R8



* FOR METRIC DEVICES: M6 x 1

Case style DO-203AB (DO-5)

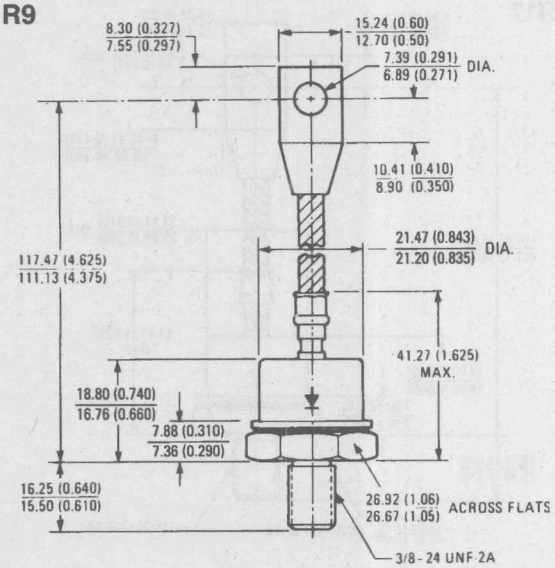
NOTE

DISCRETE DEVICES	ANODE	CATHODE
Normal Polarity	lead	stud
Reverse Polarity	stud	lead

Diodes

ALL DIMENSIONS IN MILLIMETERS (INCHES)

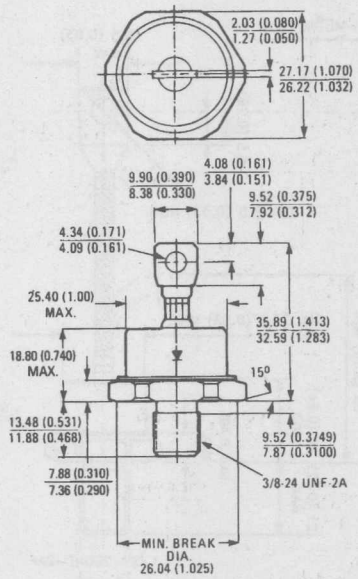
R9



M12 x 1.5 Metric Device

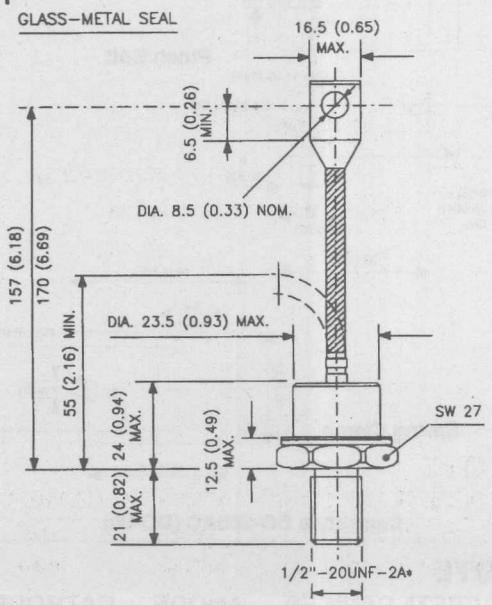
Case style DO-205AA (DO-8) (IR B-15)

R10



Case style B-42

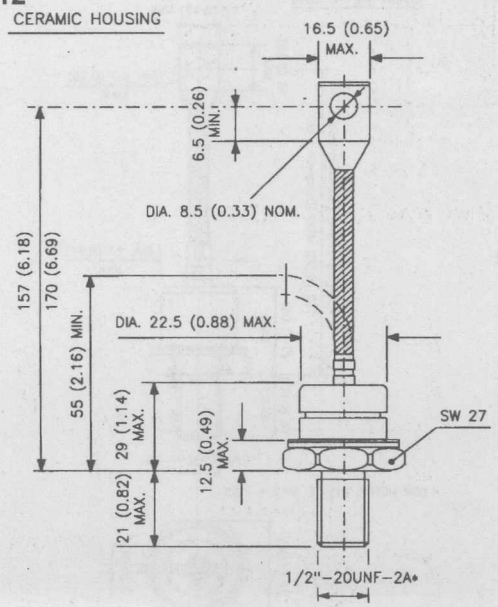
R11



* FOR METRIC DEVICE: M12 X 1.75

Case style DO-205AC (DO-30)

R12



* FOR METRIC DEVICE: M12 X 1.75

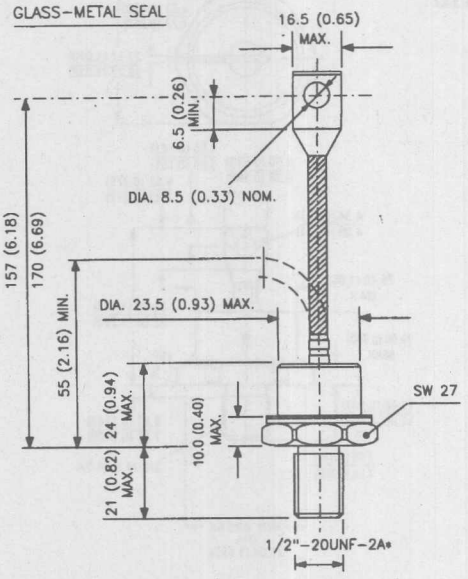
Case style DO-205AC (DO-30)

Diodes

ALL DIMENSIONS IN MILLIMETERS (INCHES)

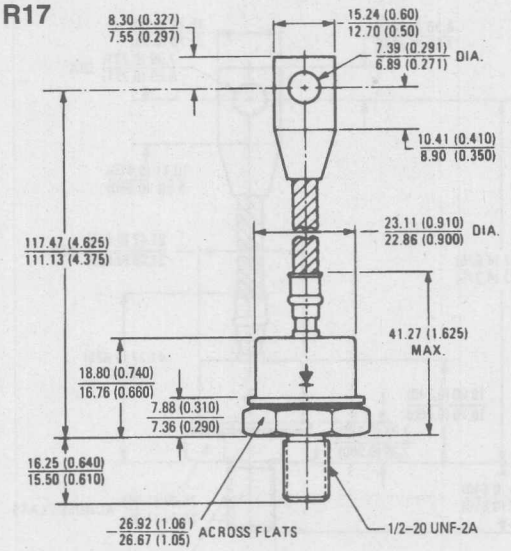
R16

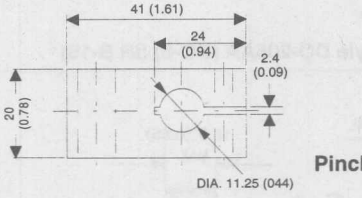
GLASS-METAL SEAL



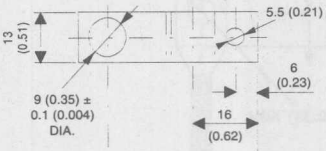
Case style DO-205AC (DO-30)

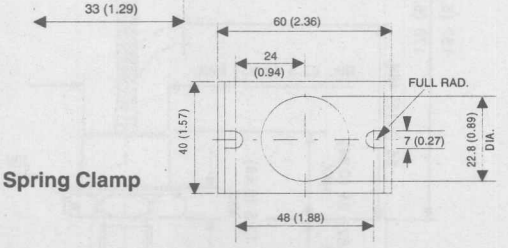
R17





Pinch Bolt



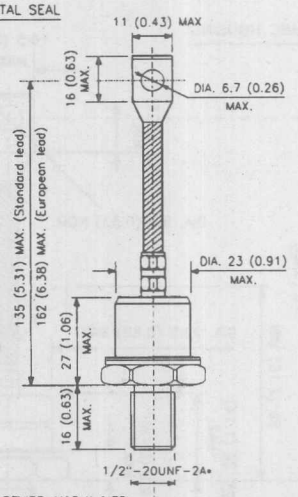


Spring Clamp

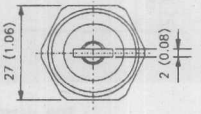
Case style DO-205AC (DO-30)

R18

GLASS-METAL SEAL



* FOR METRIC DEVICE. M12 X 1.75



Case style similar to DO-205AC (DO-8)

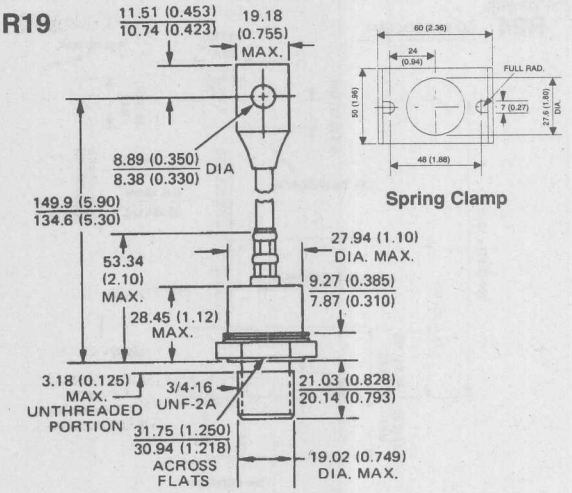
NOTE

DISCRETE DEVICES	ANODE	CATHODE
Normal Polarity	lead	stud
Reverse Polarity	stud	lead

Diodes

ALL DIMENSIONS IN MILLIMETERS (INCHES)

R19

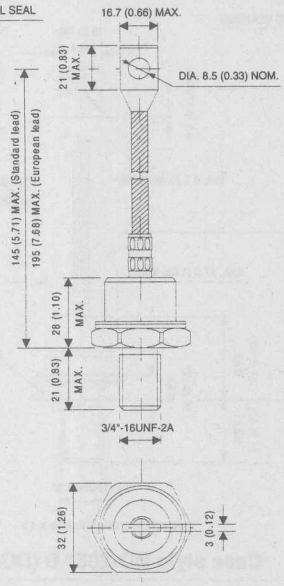


M16 x 1.5 METRIC DEVICE FOR 300U..AM
M20 x 1.5 METRIC DEVICE FOR 300U..AMA

Case style DO-205AB (DO-9, IR B-13)

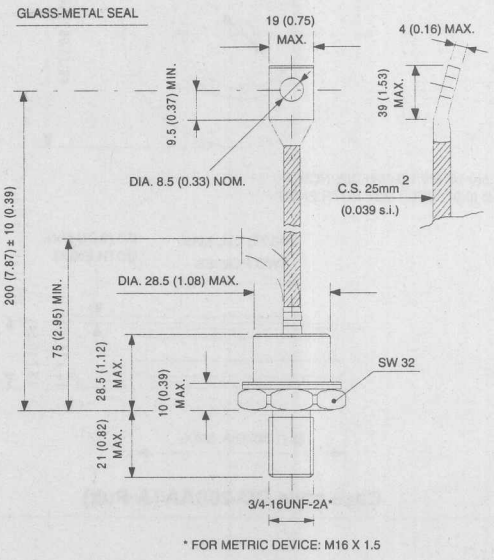
R20

GLASS-METAL SEAL



Case style DO-205AB (DO-9)

R21

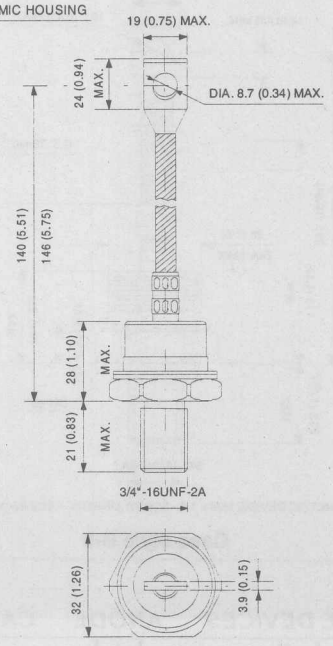


* FOR METRIC DEVICE: M16 X 1.5

Case style similar to DO-205AB (DO-8)

R22

CERAMIC HOUSING

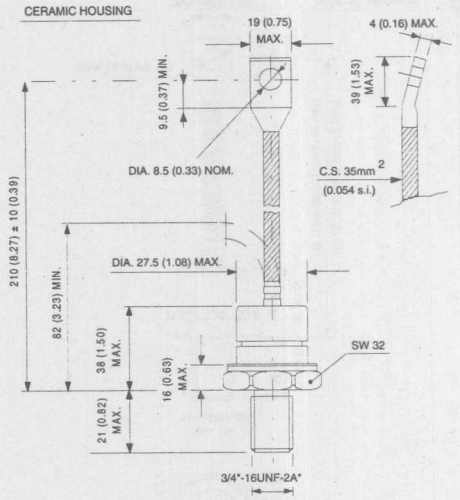


Case style DO-205AB (DO-8)

Diodes

ALL DIMENSIONS IN MILLIMETERS (INCHES)

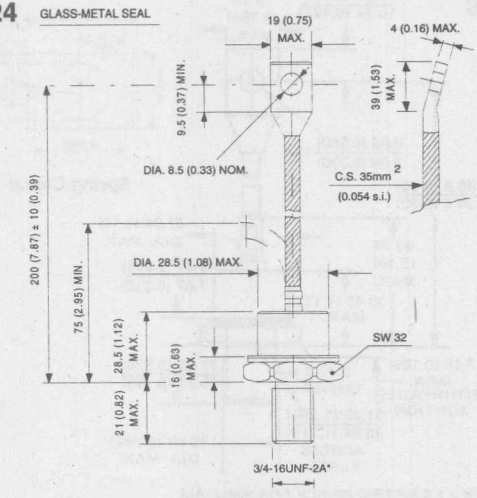
R23 CERAMIC HOUSING



* FOR METRIC DEVICE: M16 X 1.5

Case style DO-205AB (DO-9)

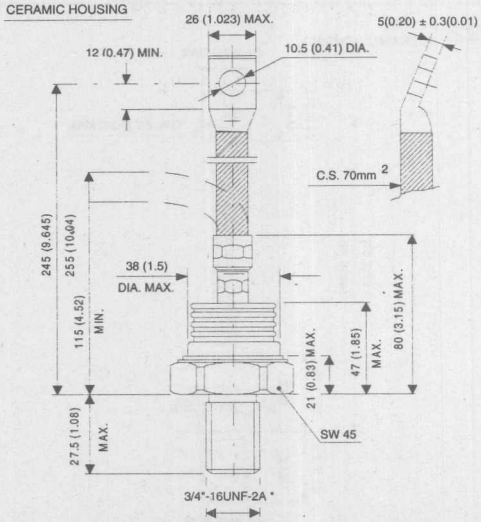
R24 GLASS-METAL SEAL



* FOR METRIC DEVICE: M16 X 1.5

Case style DO-205AB (DO-9)

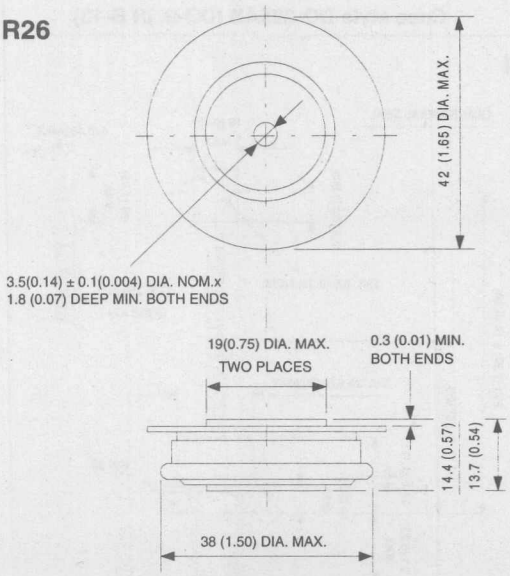
R25 CERAMIC HOUSING



* FOR METRIC DEVICE: M24 x 1.5 - SCREW LENGTH — 21(0.83) MAX.

Case style B-8

R26



Case style DO-200AA (A-Puk)

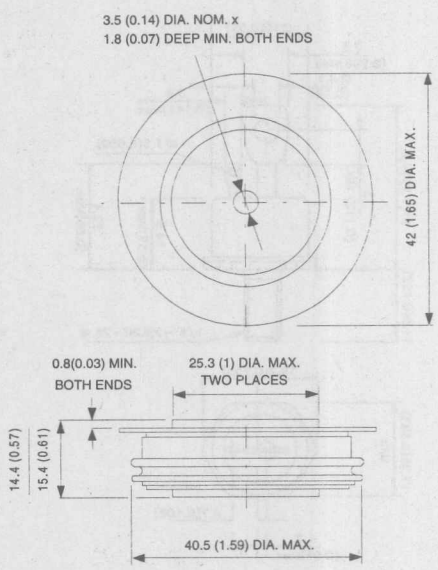
NOTES

DISCRETE DEVICES	ANODE	CATHODE
Normal Polarity	lead	stud
Reverse Polarity	stud	lead

DISCRETE DEVICES	FLANGE
Normal Polarity	anode
Reverse Polarity	cathode

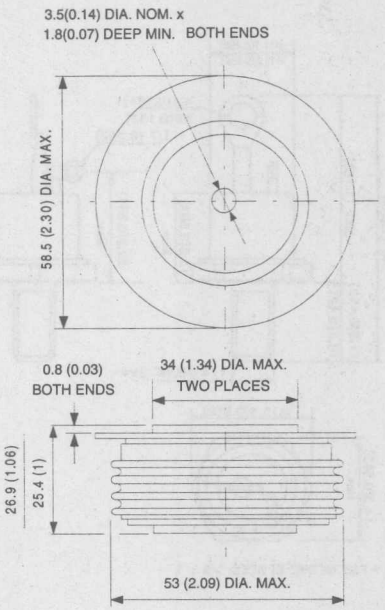
Diodes

R27



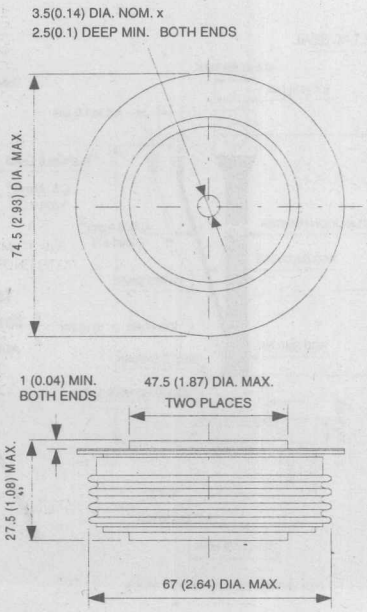
Case style B-43 (E-Puk)

R28



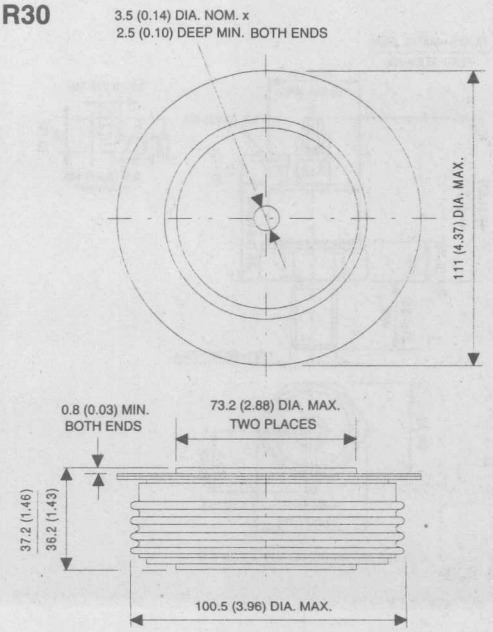
Case style DO-200AB (B-Puk)

R29



Case style DO-200AC (K-Puk)

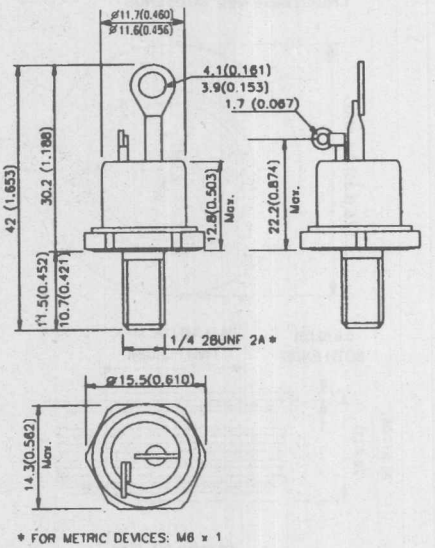
R30



Case style B-44 (R-Puk)

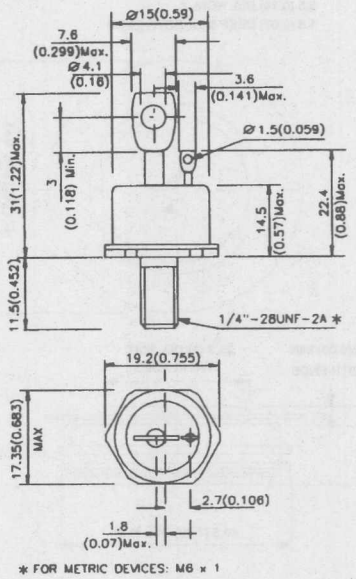
Thyristors

T1



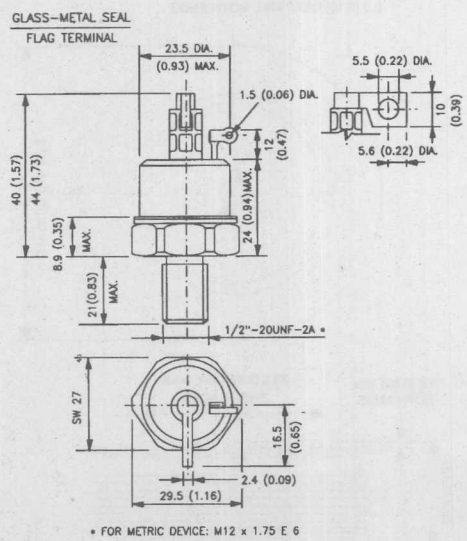
Case style TO-208AA (TO-48)

T2



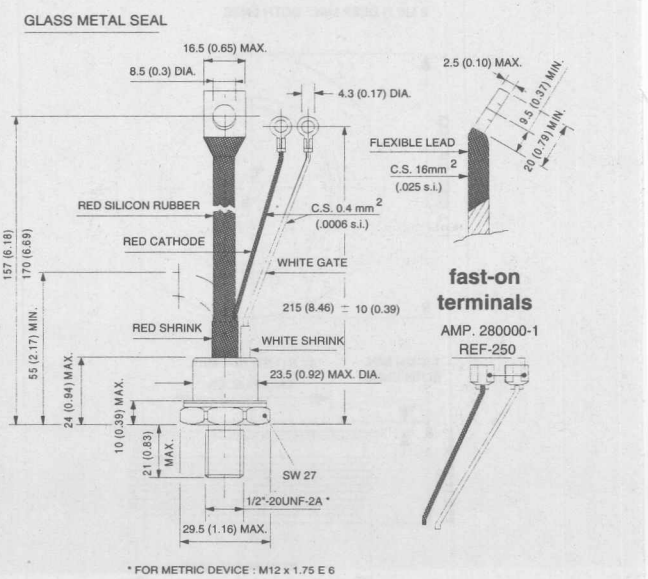
Case style TO-208AC (TO-65)

T3



Case style similar to TO-208AD (TO-83)

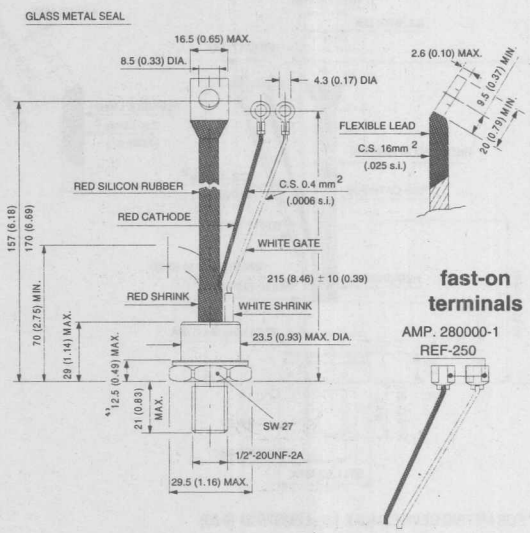
T4



Case style TO-209AC (TO-94)

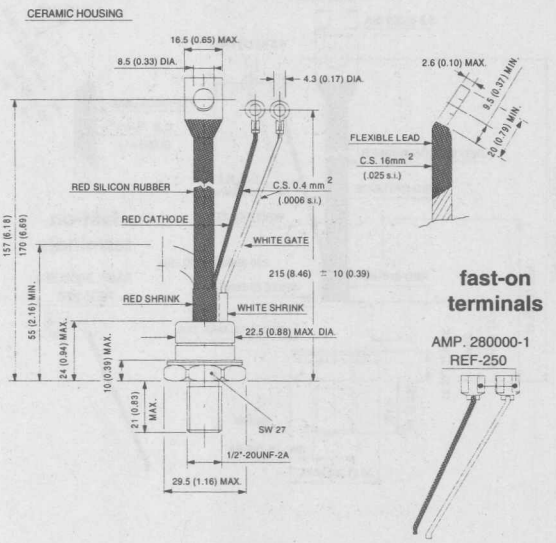
Thyristors

T5



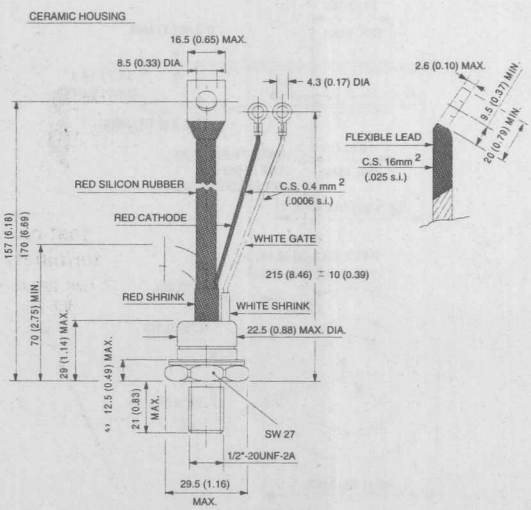
Case style TO-209AC (TO-94)

T6



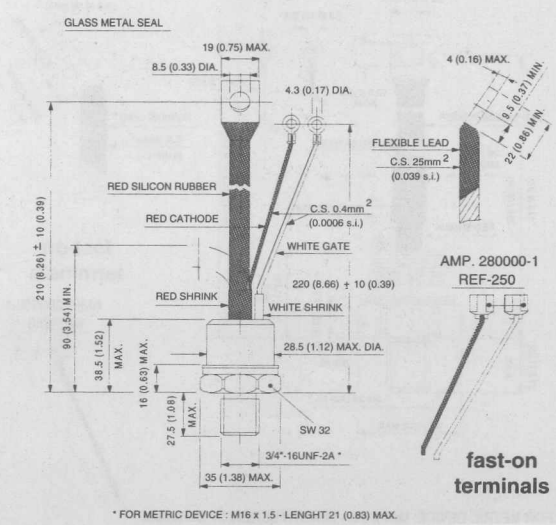
Case style TO-209AC (TO-94)

T7



Case style TO-209AC (TO-94)

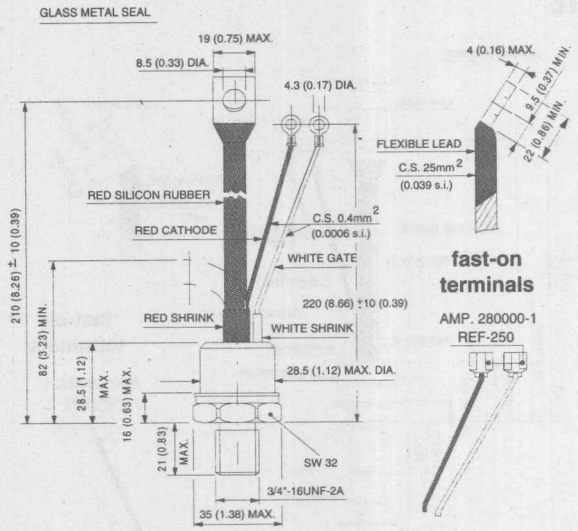
T8



Case style TO-209AB (TO-93)

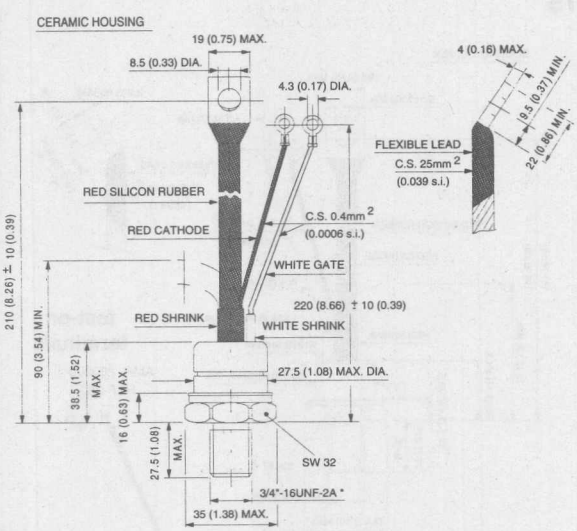
Thyristors

T9



Case style TO-209AB (TO-93)

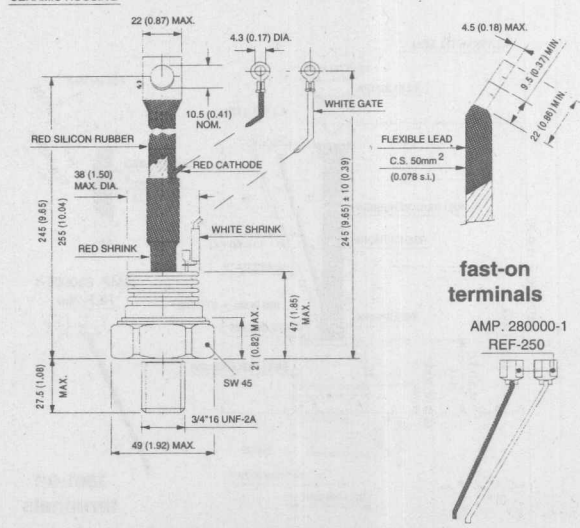
T10



* FOR METRIC DEVICE: M16 X 1.5 - LENGTH 21 (0.83)

Case style TO-208AC (TO-65)

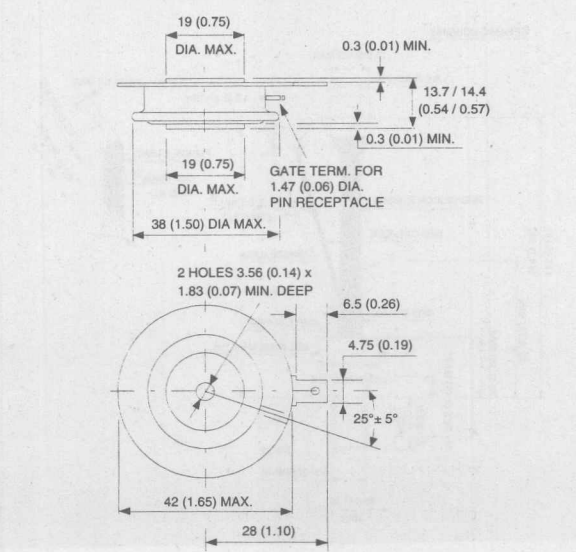
T11



* FOR METRIC DEVICE: M24 X 1.5 - LENGTH SCREW 21 (0.83) MAX.

Case style TO-209AE (TO-118)

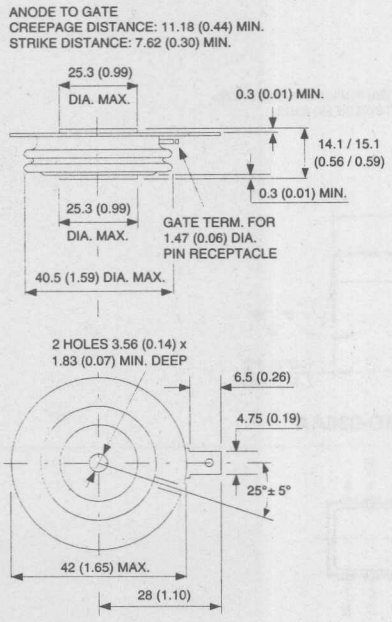
T12



Case style TO-200AB (A-Puk)

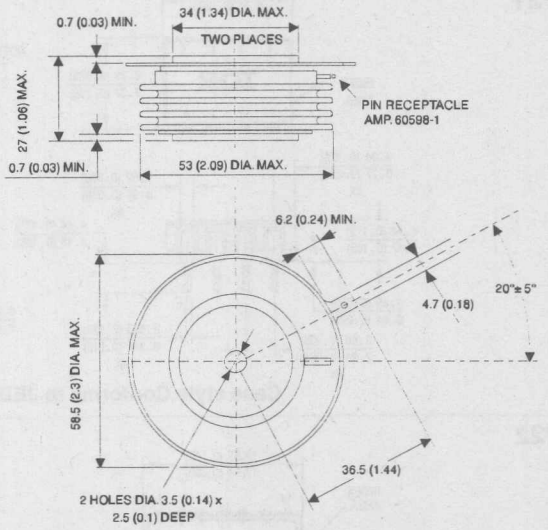
Thyristors

T13



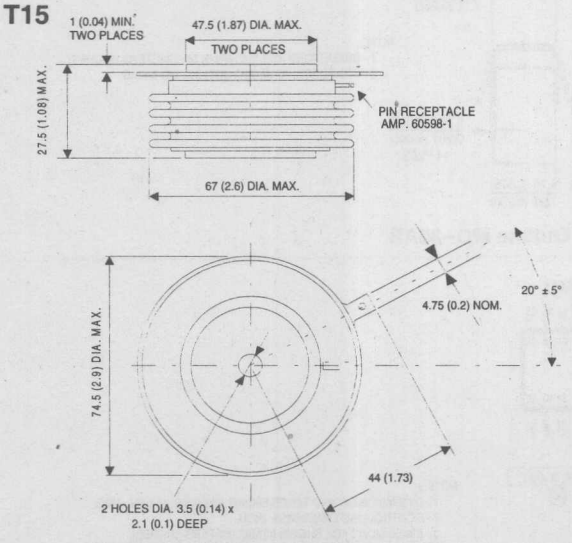
Case style TO-200AB (E-Puk)

T14



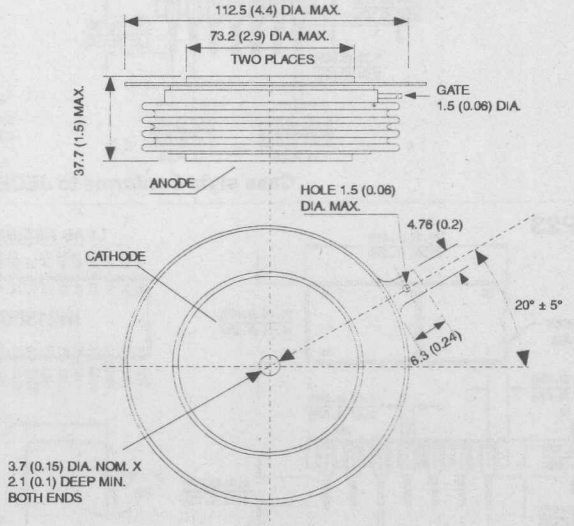
Case style TO-200AC (B-Puk)

T15



Case style A-24 (K-Puk)

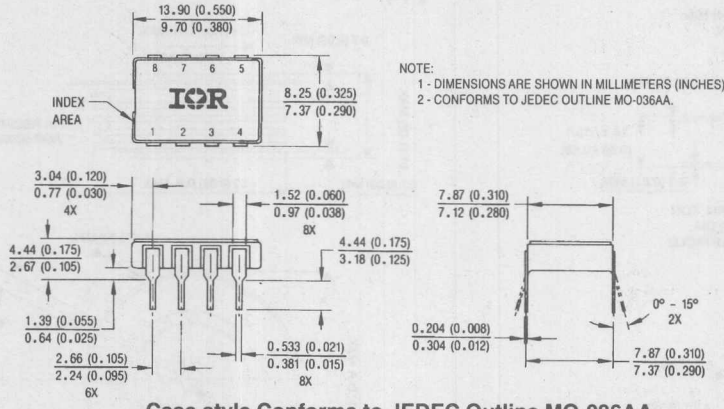
T16



Case style A-36 (R-Puk)

Government and Space: Control Integrated Circuits

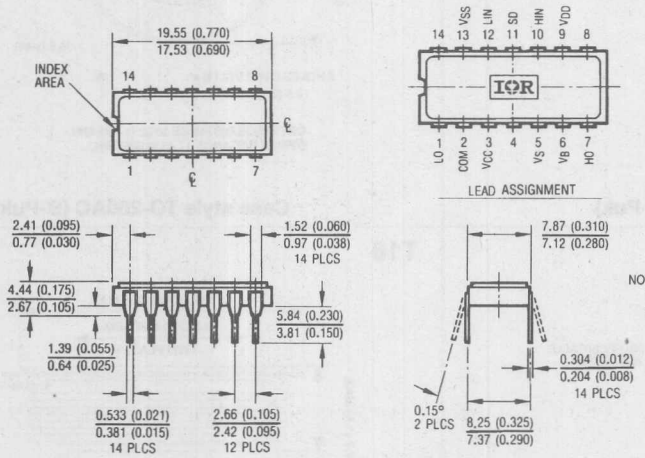
P21



NOTE:
1 - DIMENSIONS ARE SHOWN IN MILLIMETERS (INCHES).
2 - CONFORMS TO JEDEC OUTLINE MO-036AA.

Case style Conforms to JEDEC Outline MO-036AA

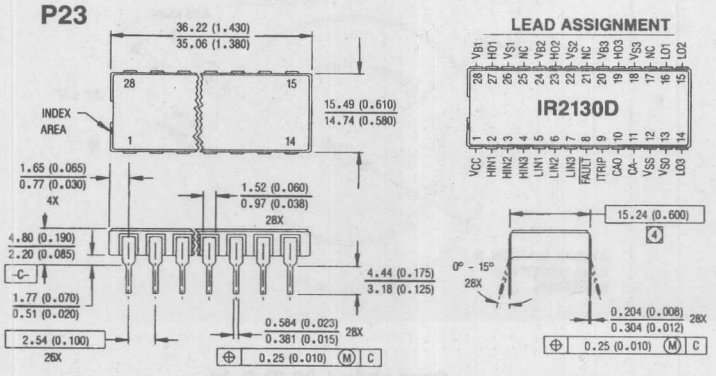
P22



NOTE:
1 - DIMENSIONS ARE SHOWN IN MILLIMETERS (INCHES).
2 - CONFORMS TO JEDEC OUTLINE MO-036AB.

Case style Conforms to JEDEC Outline MO--36AB

P23

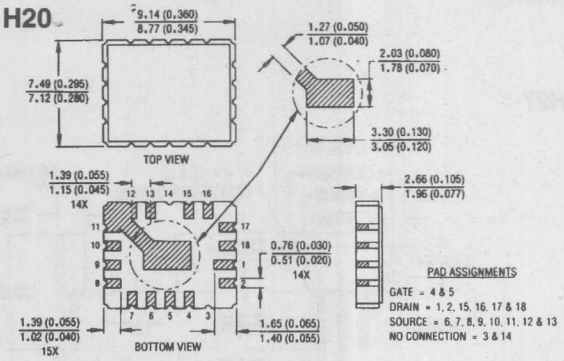


NOTES:
1 - DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2 - CONTROLLING DIMENSION: INCH.
3 - DIMENSIONS ARE SHOWN IN MILLIMETERS (INCHES).
4 DIMENSION IS TO CENTER OF LEADS WHEN FORMED PARALLEL.

Case style Conforms to JEDEC Outline MO-038AB

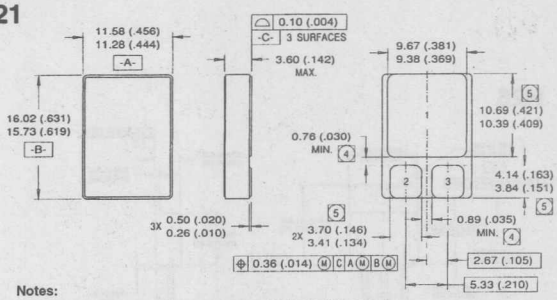
Government and Space: HEXFET® Power MOSFETs

H20



Case style Leadless Chip Carrier (LCC)

H21



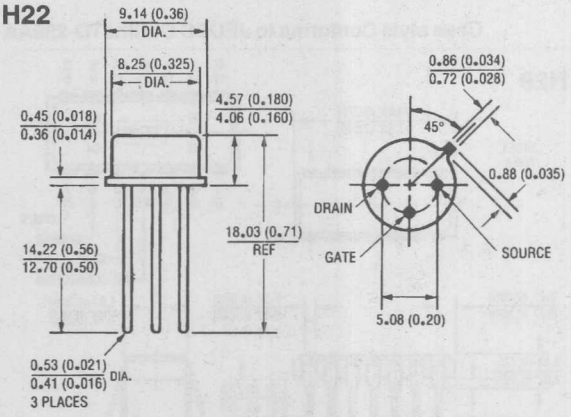
Notes:

1. Dimensioning and Tolerancing per ANSI Y14.5M-1982
2. Controlling Dimension: Inch
3. Dimensions are shown in millimeters (Inches)
4. Dimension includes metallization flash
5. Dimension does not include metallization flash

LEAD ASSIGNMENTS
1 - Drain
2 - Gate
3 - Source

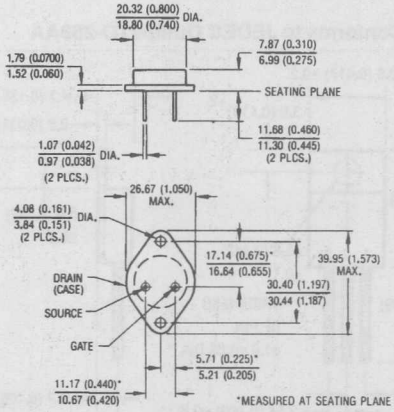
Case style SMD-1

H22



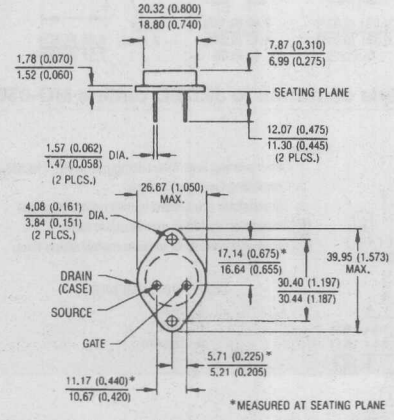
Case style conforms to JEDEC outline TO-205AF (TO-39)

H23



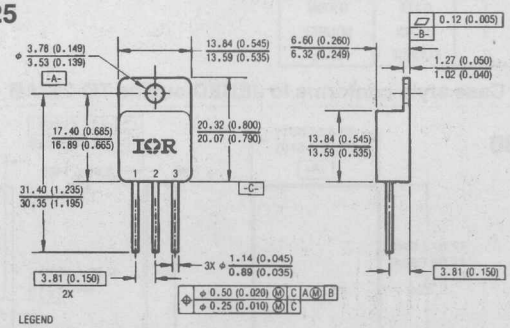
Case style conforms to JEDEC outline TO-204AA (TO-3)

H24



Case style conforms to JEDEC outline TO-204AE (modified TO-3)

H25



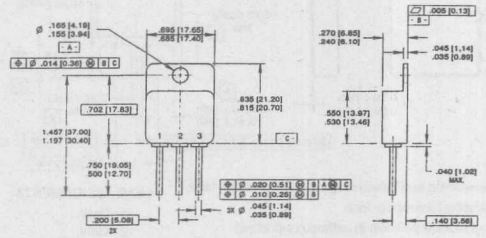
LEGEND
1 DRAIN
2 SOURCE
3 GATE

NOTES:
1 DIMENSIONING & TOLERANCING PER ANSI Y14.5M - 1982.
2 ALL DIMENSIONS ARE SHOWN IN MILLIMETERS (INCHES).

Case style conforms to JEDEC outline TO-254AA

Government and Space: HEXFET® Power MOSFETs

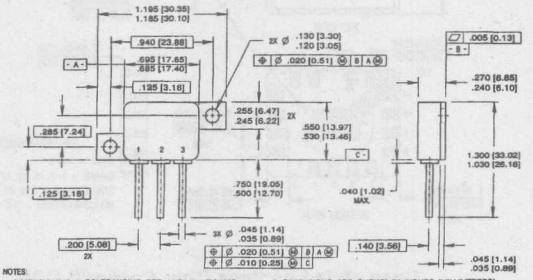
H26



NOTES:
1. DIMENSIONING & TOLERANCING PER ANSI Y14.5M-1982.
2. CONTROLLING DIMENSION: INCHES
3. DIMENSIONS ARE SHOWN IN INCHES [MILLIMETERS].
4. OUTLINE CONFORMS TO JEDEC OUTLINE TO-258AB.

Case style Conforms to JEDEC OutlineTO-258AA

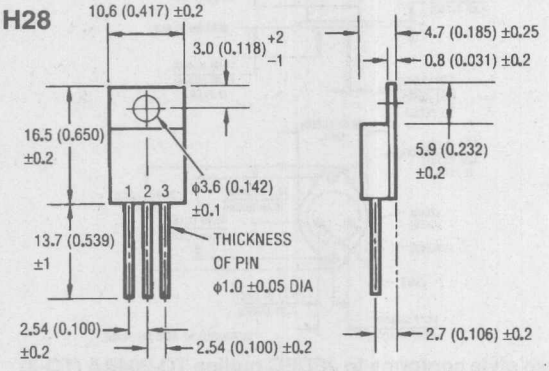
H27



NOTES:
1. DIMENSIONING & TOLERANCING PER ANSI Y14.5M-1982.
2. CONTROLLING DIMENSION: INCHES
3. DIMENSIONS ARE SHOWN IN INCHES [MILLIMETERS].
4. OUTLINE CONFORMS TO JEDEC OUTLINE TO-259AB.

Case style Conforms to JEDEC OutlineTO-259AA

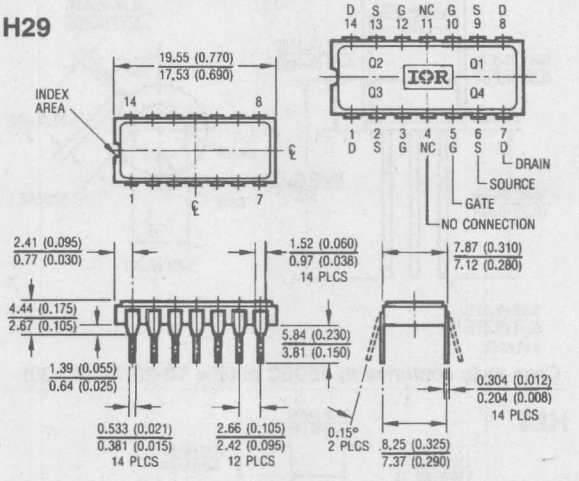
H28



TERM	IRFY..C	IRFY..CM
1	GATE	DRAIN
2	DRAIN	SOURCE
3	SOURCE	GATE

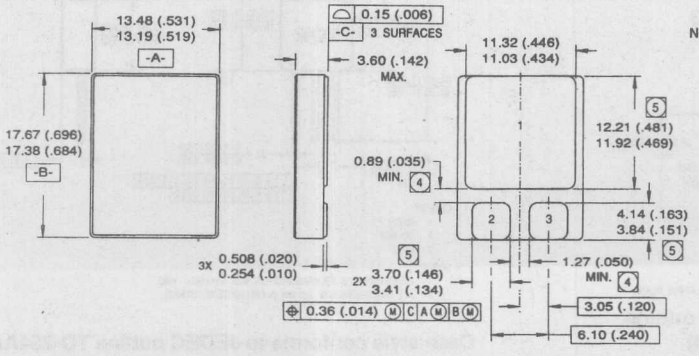
Case style conforms to JEDEC outline TO-257AB

H29



Case style conforms to JEDEC outline MO-036AB

H30



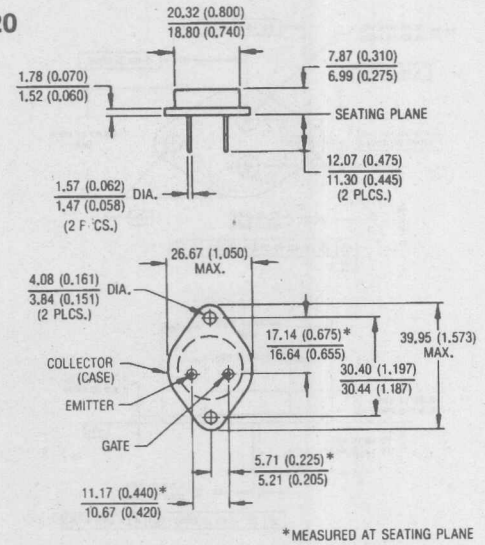
Notes:
1. Dimensioning and Tolerancing per ANSI Y14.5M-1982
2. Controlling Dimension: Inch
3. Dimensions are shown in millimeters (Inches)
4. Dimension includes metallization flash
5. Dimension does not include metallization flash

LEAD ASSIGNMENTS
1 - Drain
2 - Gate
3 - Source

Case style SMD-2

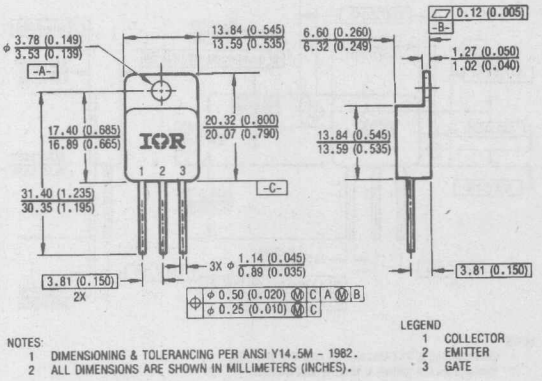
Government and Space

IG20



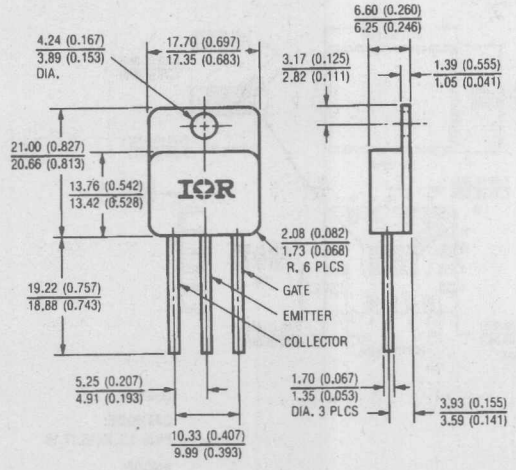
Case style conforms to JEDEC outline TO-204AE (Modified TO-3)

IG21



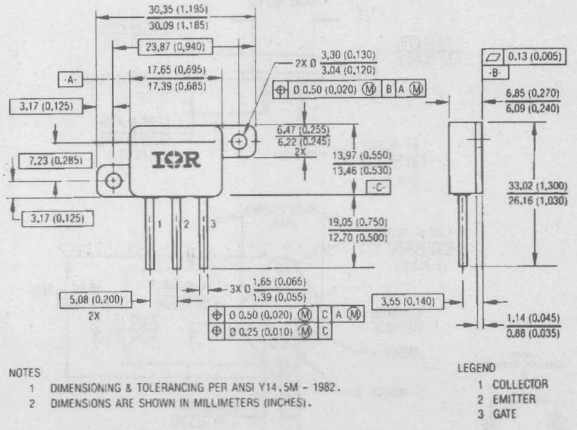
Case style conforms to JEDEC outline TO-254AA

IG22



Case style conforms to JEDEC outline TO-258AA

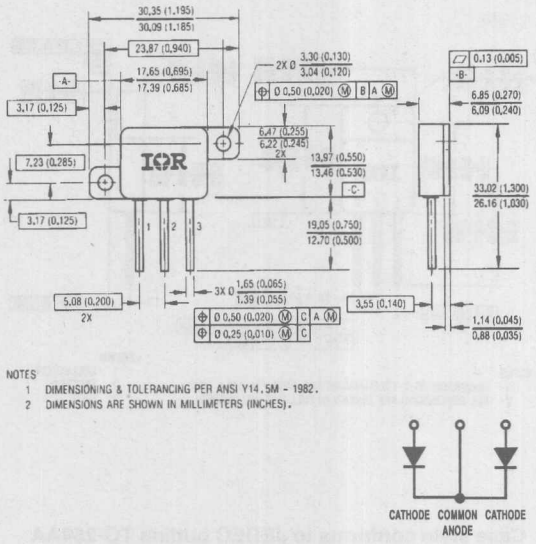
IG23



Case style conforms to JEDEC outline TO-259AA

Government and Space: HEXFRED™ and Schottky Diodes

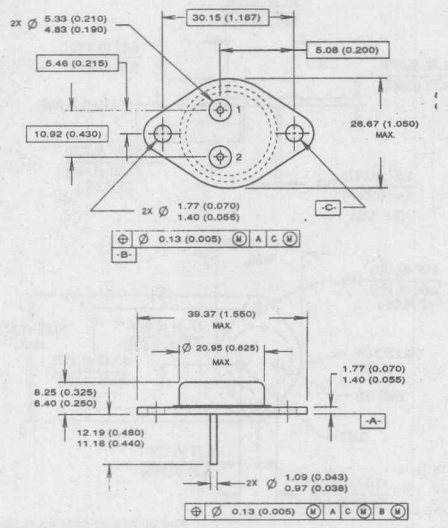
J36



NOTES
1 DIMENSIONING & TOLERANCING PER ANSI Y14.5M - 1982.
2 DIMENSIONS ARE SHOWN IN MILLIMETERS (INCHES).

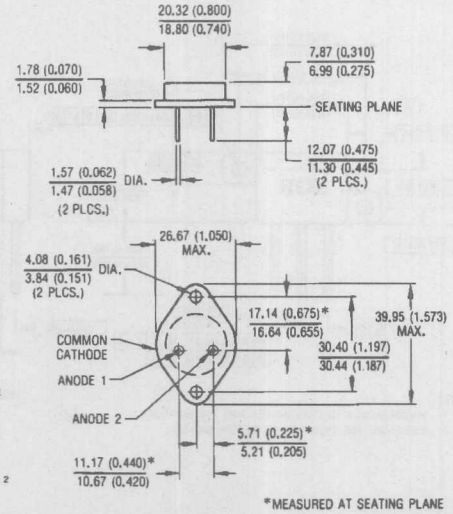
Case style conforms to JEDEC outline TO-259AA

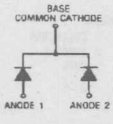
K6



Case style TO-204AA (TO-3)

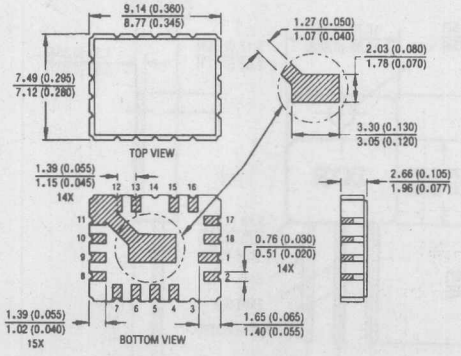
K7





Case style conforms to JEDEC outline TO-204AE (modified TO-3)

K30



LEGEND

CATHODE:
PINS 1,2,15,16,17,18

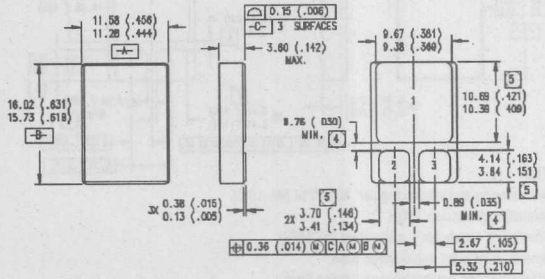
ANODE:
PINS 6,7,8,9,10,11,12,13

NO CONNECTION:
PINS 3,4,5,14

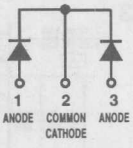
Case style Leadless Chip Carrier (LCC)

Government and Space: HEXFRED™ and Schottky Diodes

K31

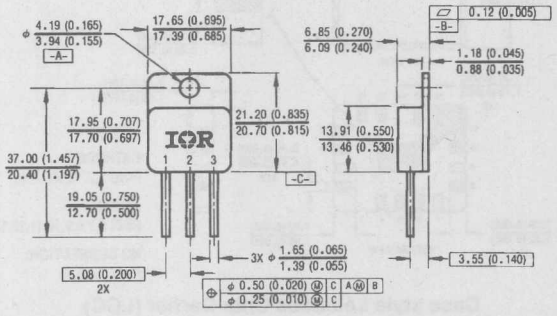


NOTES:
1. Dimensioning and tolerancing per ANSI Y14.5M, 1982.
2. Controlling dimension: INCH.
3. Dimensions are shown in millimeters (INCHES)
4. Dimension includes metallization flash
5. Dimension does not include metallization flash



Case style SMD-1

K32

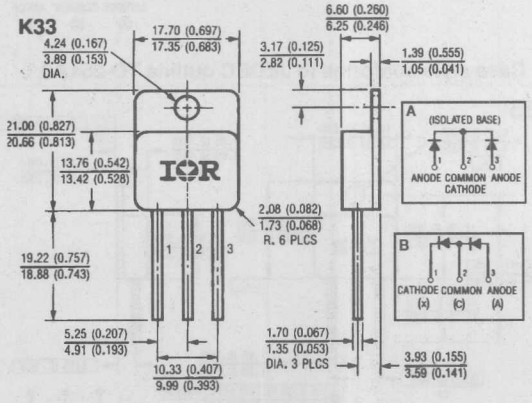


NOTES:
1 DIMENSIONING & TOLERANCING PER ANSI Y14.5M - 1982.
2 ALL DIMENSIONS ARE SHOWN IN MILLIMETERS (INCHES).

LEGEND
1 - ANHODE
2 - COMMON CATHODE
3 - ANODE

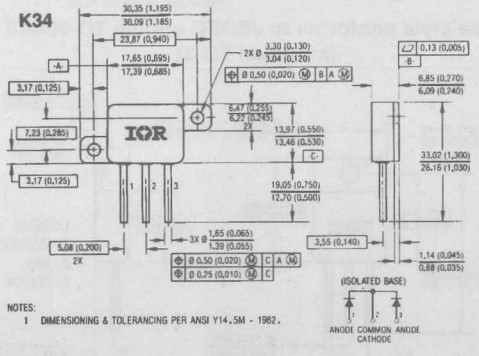
Case style conforms to JEDEC outline TO-254AA

K33



Case style conforms to JEDEC outline TO-258AA

K34

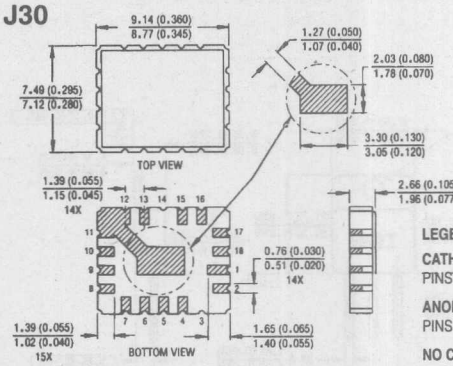


NOTES:
1 DIMENSIONING & TOLERANCING PER ANSI Y14.5M - 1982.

Case style conforms to JEDEC outline TO-259AA

Government and Space: HEXFRED™ and Schottky Diodes

J30



LEGEND

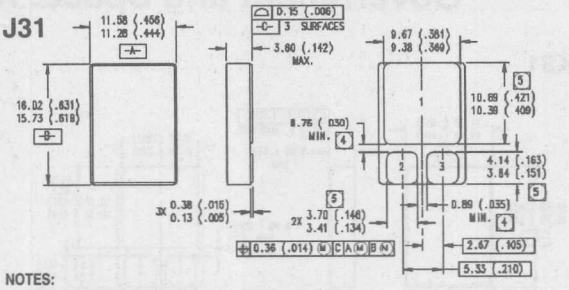
CATHODE:
PINS 1,2,15,16,17,18

ANODE:
PINS 6,7,8,9,10,11,12,13

NO CONNECTION:
PINS 3,4,5,14

Case style Leadless Chip Carrier (LCC)

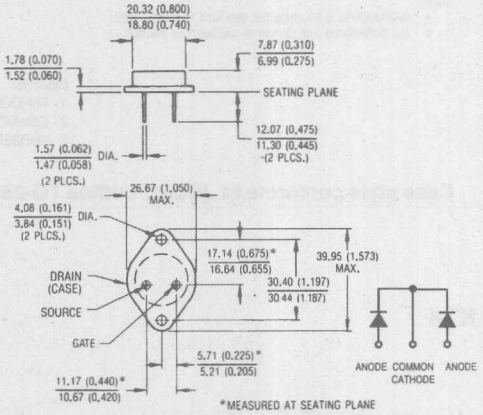
J31



NOTES:
1. Dimensioning and tolerancing per ANSI Y14.5M, 1982.
2. Controlling dimension: INCH.
3. Dimensions are shown in millimeters (INCHES)
4. Dimension includes metallization flash
5. Dimension does not include metallization flash

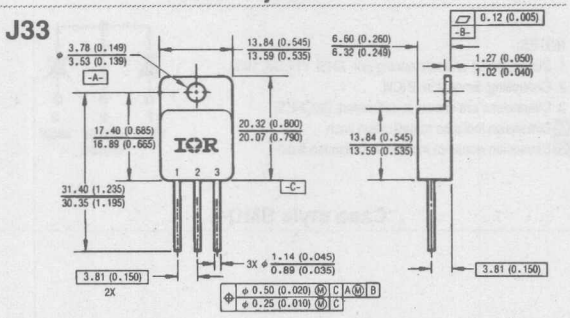
Case style SMD-1

J32

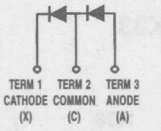


Case style conforms to JEDEC outline TO-204AE (modified TO-3)

J33

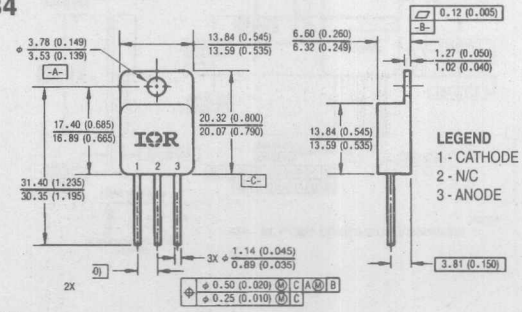


NOTES:
1. Dimensioning and tolerancing per ANSI Y14.5M, 1982.
2. Glass meniscus included in DIM D and E.
3. Controlling dimension: INCH



Case style conforms to JEDEC outline TO-254AA

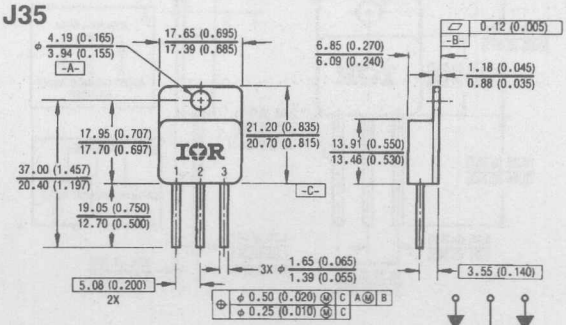
J34



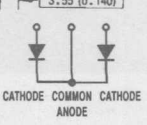
NOTES:
1. Dimensioning and tolerancing per ANSI Y14.5M, 1982.
2. Controlling dimension: INCH

Case style conforms to JEDEC outline TO-254AA

J35



NOTES:
1 DIMENSIONING & TOLERANCING PER ANSI Y14.5M - 1982.
2 ALL DIMENSIONS ARE SHOWN IN MILLIMETERS (INCHES).



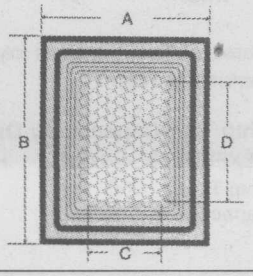
Case style conforms to JEDEC outline TO-258AA

HEXFRED Die

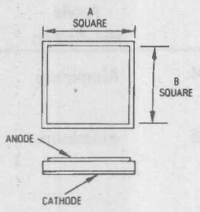
Wafer(1) Part Number	Die(2) Part Number	Die Size	Length/Side (in.) mm	"C x D" (in.) mm	Anode Metallization	Tray Quantity	Packaged Equivalent
HF06A060ACB	N/A	6	(0.066x0.066) 1.68x1.68	(0.037x0.037) 0.94x0.94	Aluminum	N/A	HFA04TB60
							HFA08TA60C
HF10A060ACB	HF10A060ACD	10	(0.090X0.090) 2.29x2.29	(0.062x0.062) 1.58x1.58	Aluminum	196	HFA08PB60
							HFA08TB60
							HFA16PA60C
							HFA16TA60C
HF20A060ACB	HF20A060ACD	20	(0.107x0.130) 2.72x3.30	(0.056x0.080) 1.42x2.03	Aluminum	100	n/a
HF30A060ACB	HF30A060ACD	30	(0.115x0.155) 2.92x3.94	(0.064x0.104) 1.63x2.64	Aluminum	100	HFA15PB60
							HFA15TB60
							HFA30PA60C
							HFA30TA60C
HF40A060ACB	HF40A060ACD	40	(0.169x0.220) 4.29x5.59	(0.117x0.169) 2.97x4.29	Aluminum	35	HFA25PB60
							HFA25TB60
							HFA50PA60C
HF20C120ACB	HF20C120ACD	20	(0.107x0.130) 2.72x3.30	(0.056x0.080) 1.42x2.03	Aluminum	100	HFA06PB120
							HFA06TB120
							HFA12PA120C
							HFA12TA120C
HF30C120ACB	HF30C120ACD	30	(0.115x0.155) 2.92x3.94	(0.064x0.104) 1.63x2.64	Aluminum	100	HFA08PB120
							HFA08TB120
							HFA16PA120C
							HFA16TA120C
							HF40C120ACB
HF40C120ACD	40(0.169x0.220) 4.29x5.59			(0.117x0.169) 2.97x4.29	Aluminum	35	HFA16PB120
							HFA16TB120
							HFA32PA120C
HF50C120ACB	HF50C120ACD	50	N/A	N/A	Aluminum	N/A	HFA30PB120

(1) Die in probed un-cut, wafer form
(2) Die in probed waffle pack form

HF	10	A	60	A	CB
HEXFRED	Die Size	A=Electron Irradiated B=Platinum Diffused C=Electron Irradiated D=Platinum Diffused	Voltage (x10)	A=Aluminum	CB=Probed Unsawn Wafer CD=Chip Packed



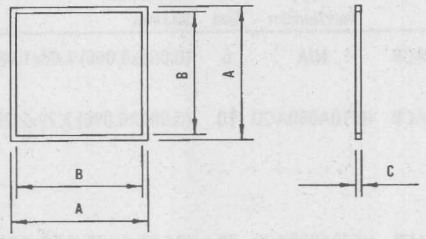
SCR and Diode Die



Diode Die
Junction Carrier Quantities

Basic Part No.	Quantity Per Carrier
SC090	196
SC125	100
SC150	49
SC175	49
SC200	36
SC275	25

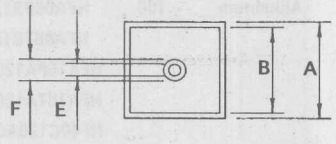
Please note that junctions are only sold in multiples of the carriers shown above.

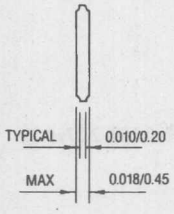


All dimensions (inches) millimeters

Die Part No.	A	B	C Maximum
IR180DM	(0.178) 4.52	(0.123) 3.12	(0.014) 0.36
IR230DM	(0.228) 5.79	(0.173) 4.39	(0.014) 0.36
IR350DM	(0.354) 8.99	(0.299) 7.59	(0.014) 0.36
IR480DM	(0.478) 12.14	(0.423) 10.74	(0.014) 0.36

Standard Recovery Diode Die

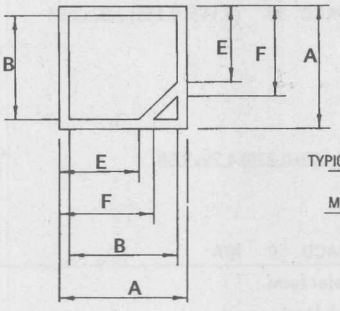


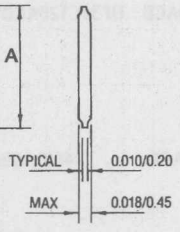


Junction Carrier Quantities

Basic Part No.	Quantity Per Carrier
IR180	256
IR210	196
IR230	196
IR250	190
IR350	100
IR480	49
IR485	49

Please note that junctions are only sold in multiples of the carriers shown above.





Die Part No.	A	B	E	F
IR180SG	(0.180) 4.60	(0.134) 3.40	(0.112) 2.87	(0.131) 3.35
IR230SG	(0.230) 5.84	(0.190) 4.83	(0.159) 4.00	(0.171) 4.04
IR480SG	(0.480) 12.19	(0.404) 10.26	(0.286) 7.26	(0.350) 9.02
IR485BG	(0.480) 12.19	(0.404) 10.26	(0.286) 7.26	(0.383) 9.73

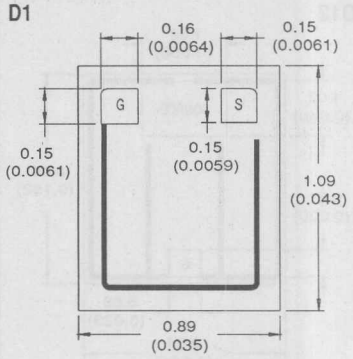
Corner Gate Thyristor Die

Chip Tray Capacity by Die Size

HEXFET DIE	HEX-Z	HEX-1	HEX-2	HEX-3	HEX-4	HEX-5	HEX-6
Chip Tray Capacity	400	140	96	45	35	16	15

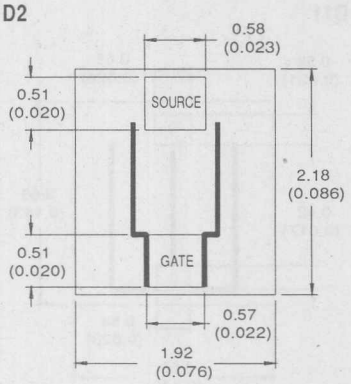
HEXFET Die Outlines

D1



HEX-Z: 100V, N-CHANNEL

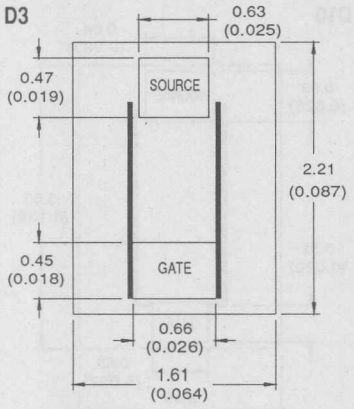
D2



HEX-1: 60V, N-CHANNEL

LOGIC LEVEL: HEX-1: 60V, N-CHANNEL

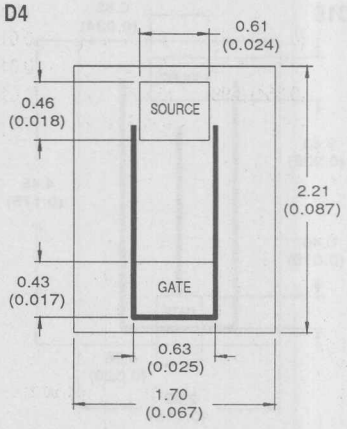
D3



HEX-1: 100V, N-CHANNEL

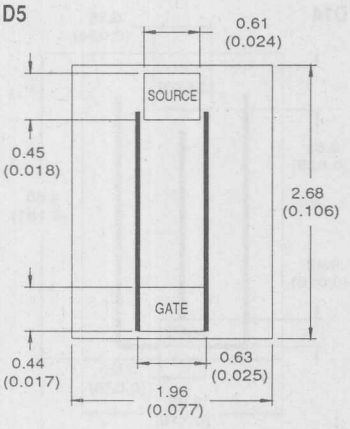
LOGIC LEVEL: HEX-1: 100V, N-CHANNEL

D4



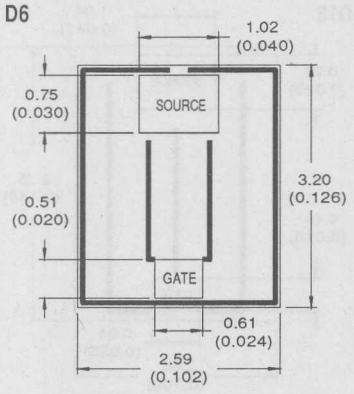
HEX-1: 200V & 250V, N-CHANNEL

D5



HEX-1: 400V, N-CHANNEL

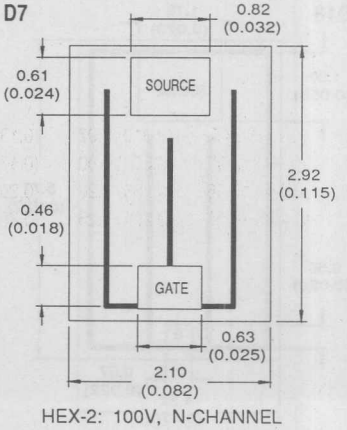
D6



HEX-2: 60V, N-CHANNEL

LOGIC LEVEL: HEX-2: 60V, N-CHANNEL

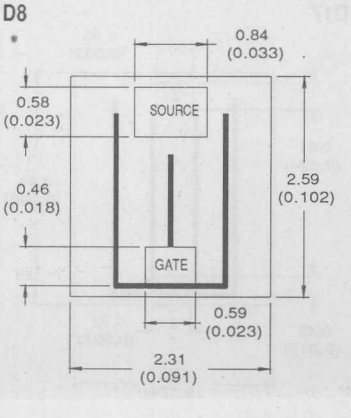
D7



HEX-2: 100V, N-CHANNEL

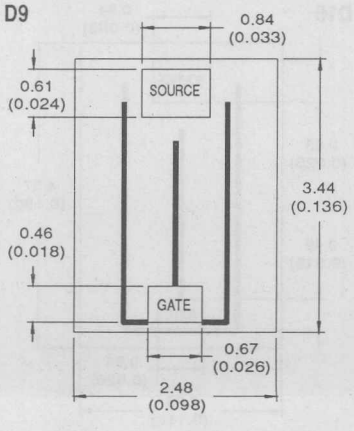
LOGIC LEVEL HEX-2: 100V, N-CHANNEL

D8



HEX-2: 200V & 250V, N-CHANNEL

D9



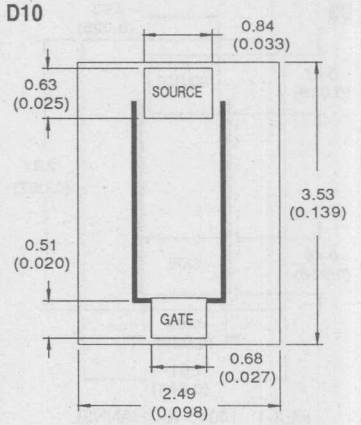
HEX-2: 400V & 500V N-CHANNEL

SEE NOTES FOR TOLERANCES AND ALL OTHER INFORMATION

ALL DIMENSIONS SHOWN IN MILLIMETERS (INCHES)

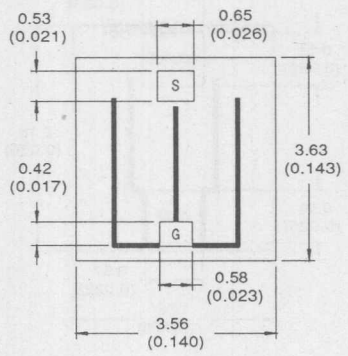
HEXFET Die Outlines

D10



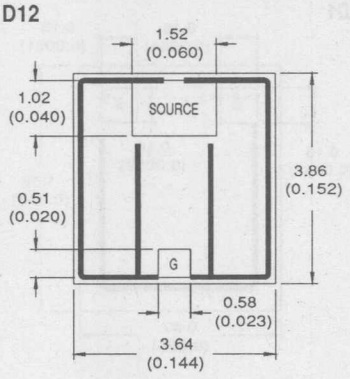
HEX-2 600V, N-CHANNEL

D11



HEX-2: 800V, 900V & 1000V, N-CHANNEL

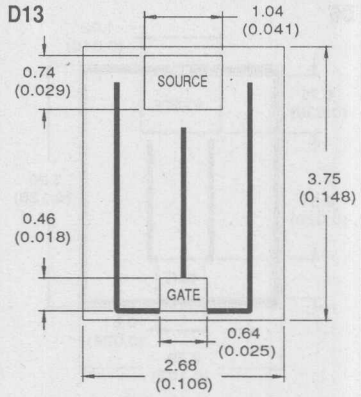
D12



HEX-3: 60V, N-CHANNEL

LOGIC LEVEL: HEX-3: 60V, N-CHANNEL

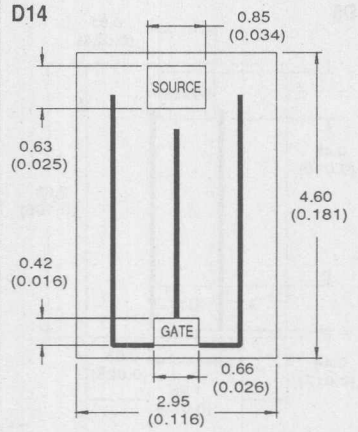
D13



HEX-3: 100V, N-CHANNEL

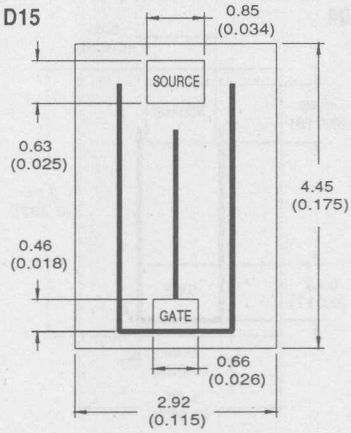
LOGIC LEVEL: HEX-3: 100V, N-CHANNEL

D14



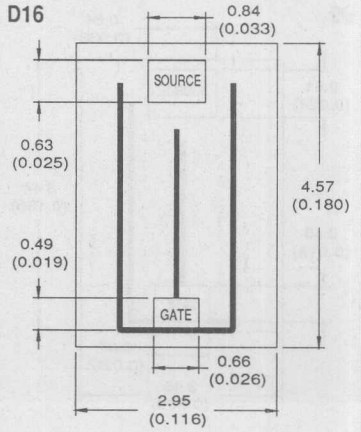
HEX-3: 200V & 250V, N-CHANNEL

D15



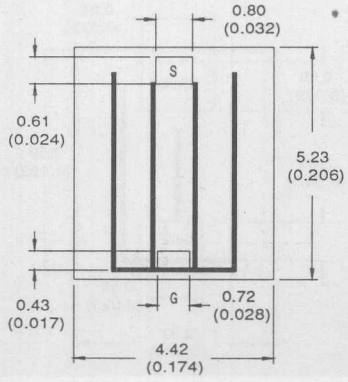
HEX-3: 400V & 500V, N-CHANNEL

D16



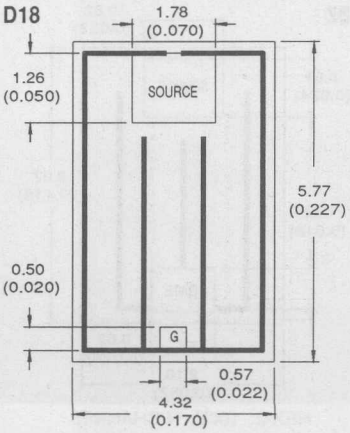
HEX-3: 600V, N-CHANNEL

D17



HEX-3: 800V, 900V & 1000V, N-CHANNEL

D18



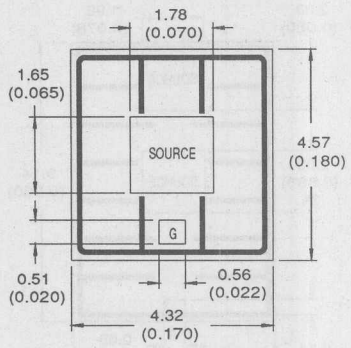
LOGIC LEVEL: HEX-4: 60V, N-CHANNEL

SEE NOTES FOR TOLERANCES AND ALL OTHER INFORMATION

ALL DIMENSIONS SHOWN IN MILLIMETERS (INCHES)

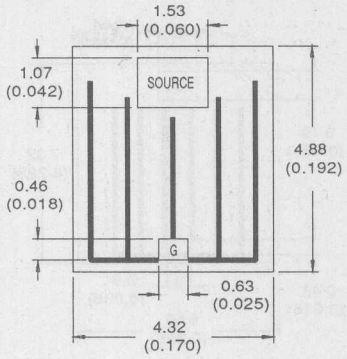
HEXFET Die Outlines

D19



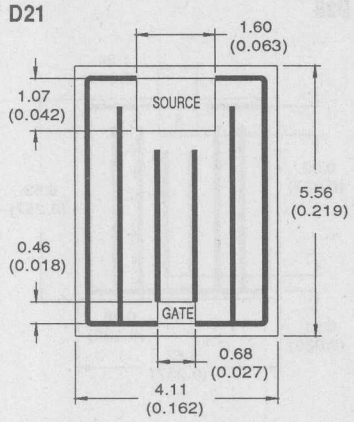
HEX-4: 50V & 60V, N-CHANNEL

D20



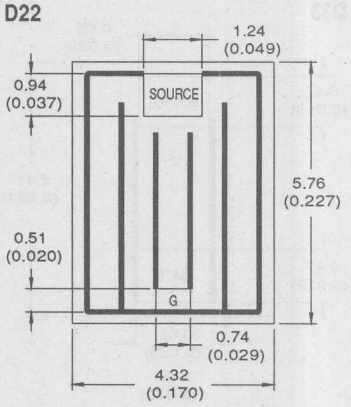
HEX-4: 100V, N-CHANNEL
LOGIC LEVEL: HEX-4: 100V, N-CHANNEL

D21



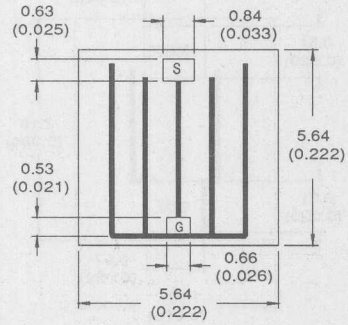
HEX-4: 200V & 250V, N-CHANNEL

D22



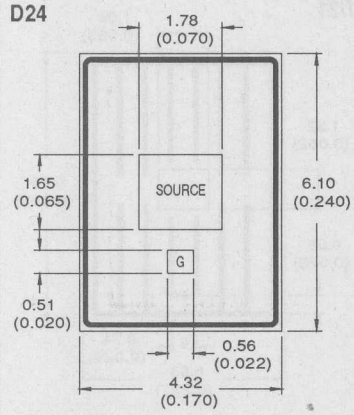
HEX-4: 400V, 500V & 600V, N-CHANNEL

D23



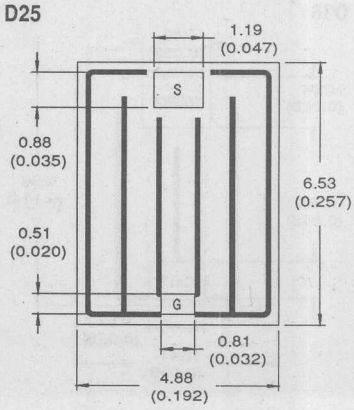
HEX-4: 800V, 900V & 1000V, N-CHANNEL

D24



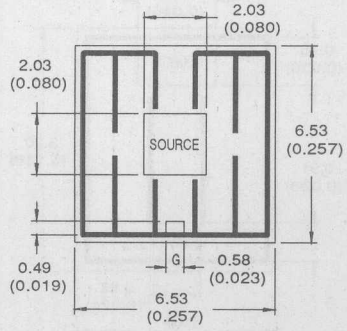
HEX-4.1: 60V, N-CHANNEL

D25



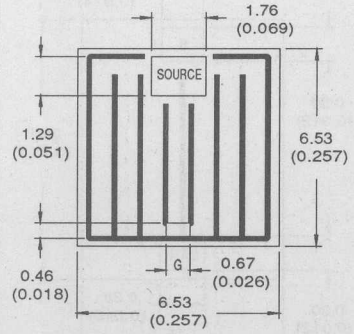
HEX-4.5: 500V, N-CHANNEL

D26



HEX-5: 60V, N-CHANNEL

D27



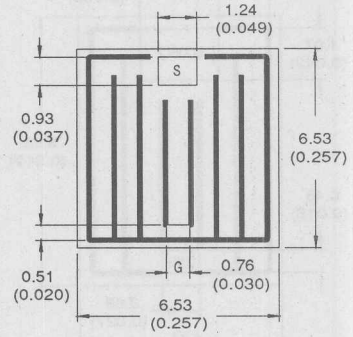
HEX-5: 100V, 200V, 250V, 400V & 500V N-CHANNEL

SEE NOTES FOR TOLERANCES AND ALL OTHER INFORMATION

ALL DIMENSIONS SHOWN IN MILLIMETERS (INCHES)

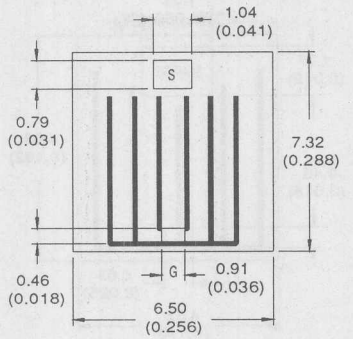
HEXFET Die Outlines

D28



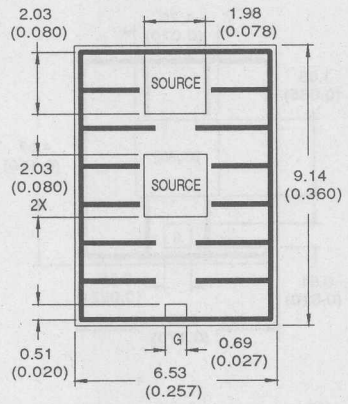
HEX-5: 600V, N-CHANNEL

D29



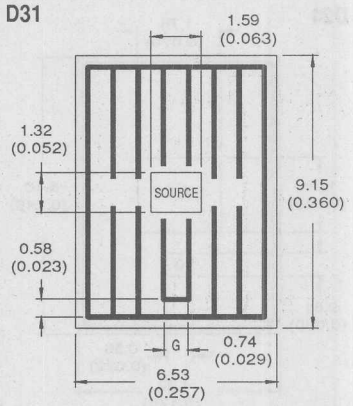
HEX-5: 800V, 900V & 1000V, N-CHANNEL

D30



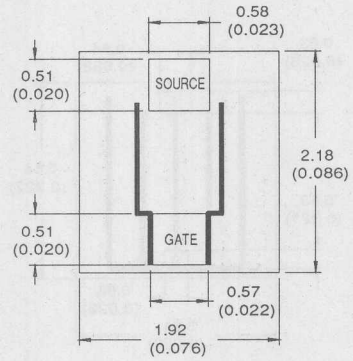
HEX-6: 60V, N-CHANNEL

D31



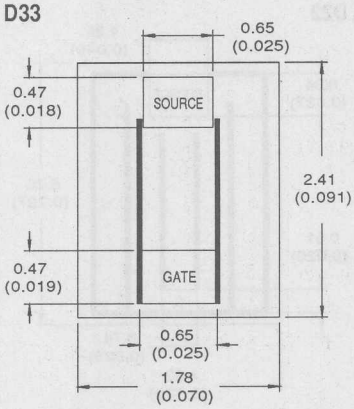
HEX-6: 400V & 500V, N-CHANNEL

D32



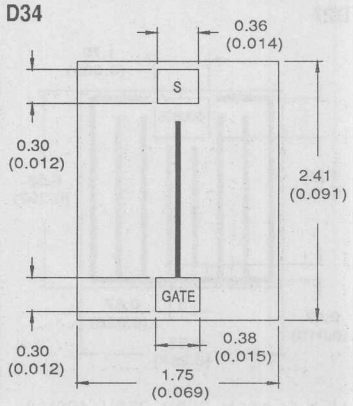
HEX-1: 60V, P-CHANNEL

D33



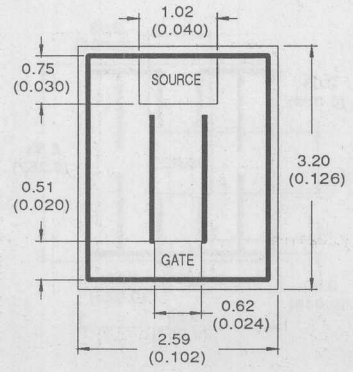
HEX-1: 100V, P-CHANNEL

D34



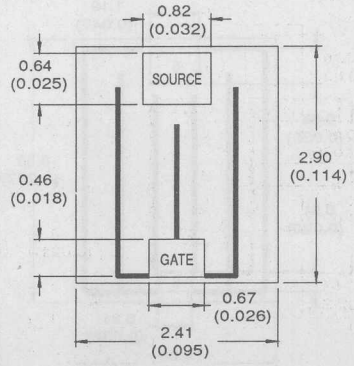
HEX-1: 200V, P-CHANNEL GEN 1

D35



HEX-2: 60V, P-CHANNEL

D36



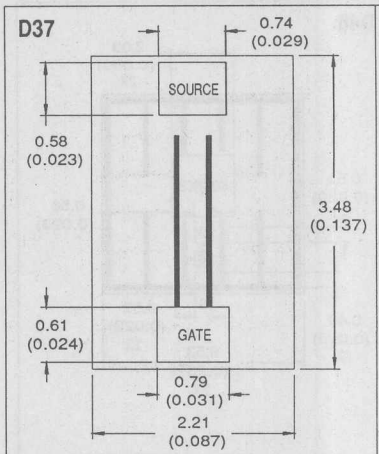
HEX-2: 100V, P-CHANNEL

SEE NOTES FOR TOLERANCES AND ALL OTHER INFORMATION

ALL DIMENSIONS SHOWN IN MILLIMETERS (INCHES)

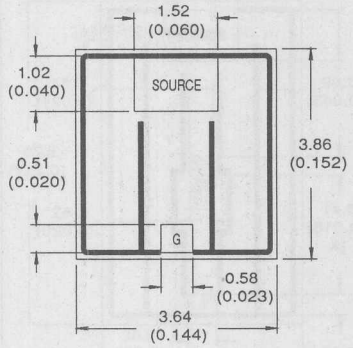
HEXFET Die Outlines

D37



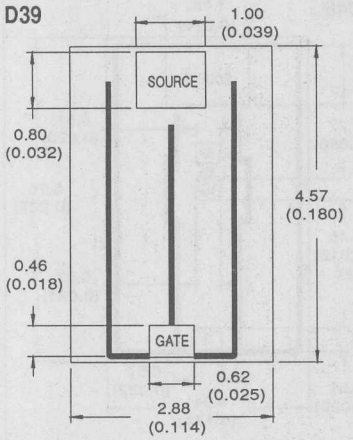
HEX-2: 200V, P-CHANNEL GEN 1

D38



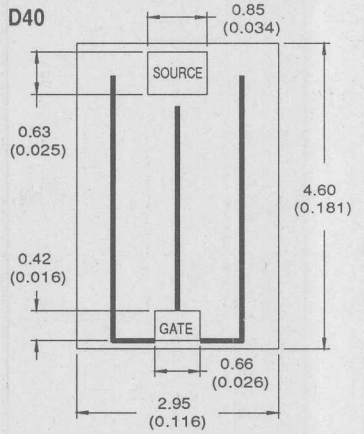
HEX-3: 60V, P-CHANNEL

D39



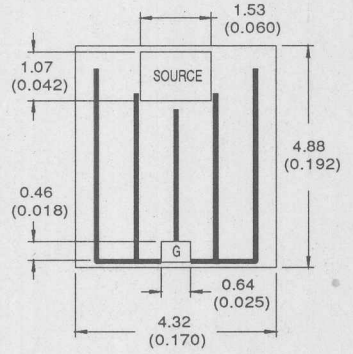
HEX-3: 100V, P-CHANNEL

D40



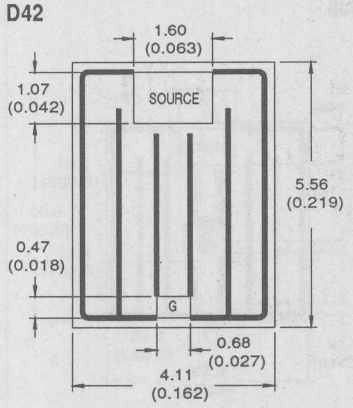
HEX-3: 200V, P-CHANNEL

D41



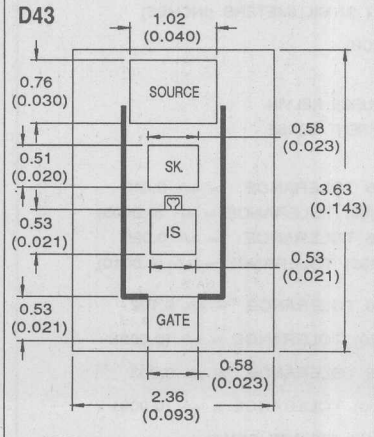
HEX-4: 100V, P-CHANNEL

D42



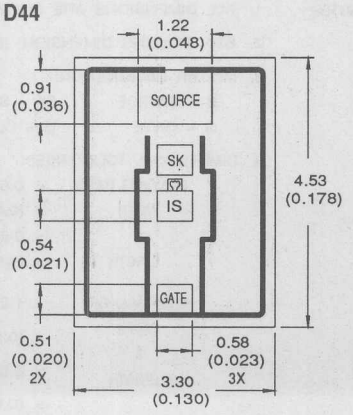
HEX-4: 200V, P-CHANNEL

D43



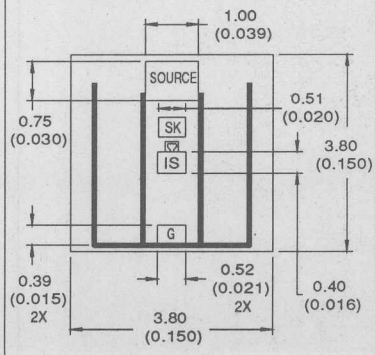
HEXSense-2: 60V, N-CHANNEL

D44



HEXSense-3: 60V, N-CHANNEL

D45



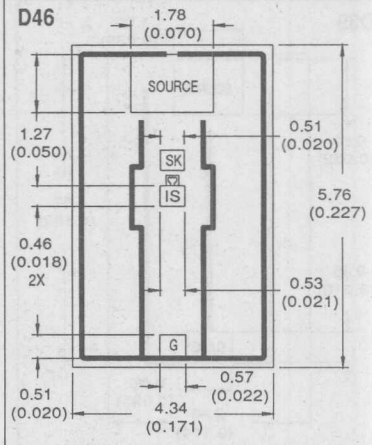
HEXSense-3: 100V TO 500V, N-CHANNEL

SEE NOTES FOR TOLERANCES AND ALL OTHER INFORMATION

ALL DIMENSIONS SHOWN IN MILLIMETERS (INCHES)

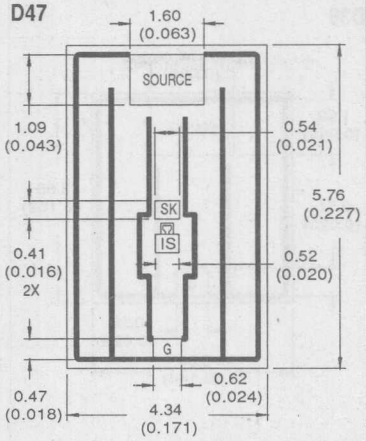
HEXFET Die Outlines

D46



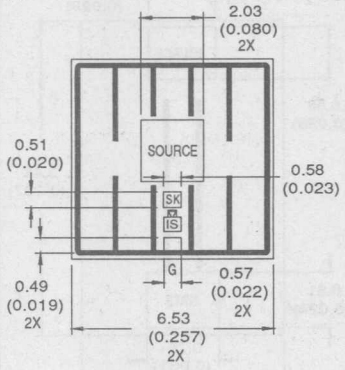
HEXSense-4: 60V, N-CHANNEL

D47



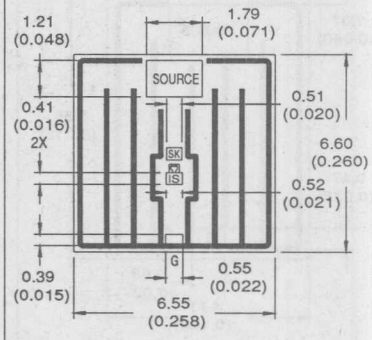
HEXSense-4: 100V TO 500V, N-CHANNEL

D48



HEXSense-5: 60V, N-CHANNEL

D49



HEXSense-5: 100V TO 500V, N-CHANNEL

NOTES:

1. ALL DIMENSIONS ARE SHOWN IN MILLIMETERS (INCHES)
2. CONTROLLING DIMENSION: (INCH).
3. LETTER DESIGNATION:
   S = SOURCE SK = SOURCE KELVIN
   G = GATE IS = CURRENT SENSE
4. DIMENSIONAL TOLERANCES:

BONDING PADS: WIDTH & LENGTH	< 0.635 TOLERANCE	= +/- 0.013
	< (0.0250) TOLERANCE	= +/- (0.0005)
	> 0.635 TOLERANCE	= +/- 0.025
	> (0.0250) TOLERANCE	= +/- (0.0010)
OVERALL DIE: WIDTH & LENGTH	< 1.270 TOLERANCE	= +/- 0.102
	< (0.050) TOLERANCE	= +/- (0.004)
	> 0.635 TOLERANCE	= +/- 0.203
	> (0.050) TOLERANCE	= +/- (0.008)

5. UNLESS OTHERWISE NOTED ALL DIE ARE GEN III

CES & ALL OTHER INFORMATION

ALL DIMENSIONS SHOWN IN MILLIMETERS (INCHES)

DATA BOOKS

CIC-1	CONTROL INTEGRATED CIRCUITS
DHP-1	DISCRETE HIGH POWER SEMICONDUCTORS, DIODES, THYRISTORS
GSP-1	GOVERNMENT AND SPACE PRODUCTS DESIGNER'S MANUAL
HDM-1, VOL. 1	HEXFET DESIGNER'S MANUAL - APPLICATION NOTES & RELIABILITY DATA
HDM-1, VOL. 3	HEXFET DESIGNER'S MANUAL (D-PAK,SMD-220,SOT-89,SO-8,SOT-223,TO-220 FULLPAK, TO-247 FULLPAK, HEXDIPS, I-PAK, TO-220 & TO-247
IGBT-3	IGBT DESIGNER'S MANUAL, INSULATED GATE BIPOLAR TRANSISTOR
MPIC-8	MICROELECTRONIC RELAY DESIGNER'S MANUAL
SDM-1	SCHOTTKY DIODE DESIGNER'S MANUAL
SFC-97	POWER SEMICONDUCTOR 1996 PRODUCT DIGEST
SMP-1	SURFACE-MOUNT POWER SEMICONDUCTORS - A TECHNICAL MANUAL FOR PORTABLE ELECTRONICS CIRCUIT DESIGNERS

APPLICATION NOTES

GBAN-HEX-1	THE HEX-PAK IR's HIGH POWER HEXFET MODULE
GBAN-PVI-1	THE PVI-A VERSATILE NEW CIRCUIT ELEMENT
GBAN-AP-1	THE ADD A PAK POWER MODULE EXPLAINED
AN-100	AC LOAD SWITCHING WITH CHIPSWITCH MICROELECTRONIC RELAYS
AN.101	CHOOSING AN INPUT RESISTOR FOR A MICROELECTRONIC RELAY
AN-102	INDUCTIVE LOAD SWITCHING CHARACTERISTICS OF THE CHIPSWITCH
AN-103	THERMAL EVALUATION OF CHIPSWITCH IN PROGRAMMABLE CONTROLLERS
AN-104	THE PHOTOVOLTAIC RELAY: A NEW SOLID STATE CONTROL DEVICE
AN-105	ADVANTAGES OF PHOTOVOLTAIC RELAYS IN MULTIPLEXERS
AN-106	THE SWITCHING LIFE OF BOSFET PHOTOVOLTAIC RELAYS
AN-107	SHORT CIRCUIT WITHSTAND CAPABILITY OF THE PHOTOVOLTAIC RELAY
AN-305	CALCULATION OF RECTANGULAR WAVEFORM CURRENT RATING OF THYRISTORS
AN-309	SCRS - THEIR PARAMETERS, SPECIFICATIONS, RATINGS, AND CHARACTERISTICS
AN-312	SELECTION OF SCR'S FOR SINGLE PHASE DC MOTOR DRIVES
AN-701	THERMAL AND HEAT TRANSFER DATA FOR HEAT EXCHANGERS
AN-804	DETERMINATION OF AVAILABLE FAULT CURRENT FOR SEMICONDUCTOR FUSING
AN-930A	APPLYING INTERNATIONAL RECTIFIER POWER MOSFETS
AN-931D	CUSTOM ASSEMBLY OF HEXFET DICE
AN-932	RELIABILITY...THE KEY TO IR'S TO-220 DEVICES
AN-933	SWITCHING TRANSIENTS IN HIGH-FREQUENCY, HIGH-POWER CONVERTERS USING POWER MOSFETS
AN-934B	THE HEXFETS INTEGRAL BODY DIODE - ITS CHARACTERISTICS AND LIMITATIONS
AN-935	BIPOLAR POWER TRANSISTOR CHIPS FOR HYBRID ASSEMBLIES
AN-936A	THE DO'S AND DON'TS OF USING POWER HEXFETS
AN-937A	GATE DRIVE CHARACTERISTIACS AND REQUIREMENTS FOR POWER MOSFETS
AN-939A	A UNIVERSAL 100KHZ POWER SUPPLY USING A SINGLE HEXFET
AN-940B	AN INTRODUCTION TO INTERNATIONAL RECTIFIER P-CHANNEL HEXFETs
AN-941B	A CHOPPER FOR MOTOR SPEED CONTROL USING PARALLEL CONNECTED POWER HEXFETS
AN-942	SIMPLIFIED HEXFET POWER DISSIPATION AND JUNCTION TEMPERATURE CALCULATION SPEEDS HEATSINK DESIGN
AN-943	THE IMPACT OF HEXFETS ON PRODUCT PROFITABILITY: AN ECONOMIC DISCUSSION OF POWER MOSFETS
AN-944A	A NEW GATE CHARGE FACTOR LEADS TO EASY DRIVE FOR POWER MOSFET CIRCUITS
AN-945	UNDERSTANDING HEXFET CURRENT RATINGS
AN-946B	HIGH VOLTAGE, HIGH FREQUENCY SWITCHING USING A CASCADE CONNECTION OF HEXFET AND BIPOLAR TRANSISTOR
AN-947	UNDERSTANDING HEXFET SWITCHING PERFORMANCE
AN-948A	LINEAR POWER AMPLIFIER USING COMPLEMENTARY HEXFETS
AN-949B	CURRENT RATINGS, SAFE OPERATING AREA AND HIGH FREQUENCY SWITCHING PERFORMANCE OF POWER MOSFETS
AN-950B	TRANSFORMER-ISOLATED HEXFET DRIVER PROVIDES VERY LARGE DUTY CYCLE RATIOS
AN-952A	A MULTIPLE OUTPUT, OFF-LINE SWITCHING POWER USING HEXFETS
AN-953	MORE POWER FROM HEXDIPS
AN-954A	SPICE 2 COMPUTER MODELS FOR HEXFETS
AN-955	PROTECTING POWER MOSFETS FROM ESD
AN-956A	USING SURFACE MOUNTED DEVICES
AN-957B	MEASURING HEXFET CHARACTERISTICS
AN-958	HEXFET POWER MOSFET AVALANCHE RATINGS
AN-959B	AN INTRODUCTION TO THE HEXSENSE CURRENT-SENSING DEVICE
AN-960A	A 250 WATT CURRENT-CONTROLLED SMPS WITH SYNCHRONIOUS RECTIFICATION
AN-961B	USING HEXSENSE CURRENT-SENSE HEXFETS IN CURRENT-MODE CONTROL POWER SUPPLIES
AN-962	A 70W BOOST-BUCK (CUK) CONVERTER USING HEXSENSE CURRENT-MODE CONTROL
AN-963	230 WATT BUCK REGULATOR WITH HEXSENSE RECTIFIERS,STANDARD RECOVERY,FAST
AN-964D	CHARACTERISTICS OF HEXFET III DICE

APPLICATION NOTES, cont.

AN-965A	A 500W 100 KHZ RESONANT CONVERTER USING HEXFETS
AN-966A	HEXFET III: A NEW GENERATION OF POWER MOSFETS
AN-967A	USING HEXFET III IN PWM INVERTERS FOR MOTOR DRIVES AND UPS SYSTEMS
AN-968	SELECTING AND DESIGNING IN THE RIGHT SCHOTTKY
AN-969	ECONOMIC, HIGH PERFORMANCE, HIGH EFFICIENCY ELECTRONIC IGNITION WITH AVALANCHE-RATED HEXFETS POST REGULATORS
AN-970	HEXFET POWER MOSFETS IN LOW DROPOUT LINEAR POST-REGULATORS
AN-971	SWITCHING CHARACTERISTICS OF LOGIC LEVEL HEXFET POWER MOSFETS
AN-972B	THERMAL AND MECHANICAL CONSIDERATIONS FOR FULLPAK APPLICATIONS
AN-973	HEXFETS IMPROVE EFFICIENCY, EXPAND LIFE OF ELECTRONIC LIGHTING BALLASTS
AN-975B	SPICE COMPUTER MODELS FOR HEXFET POWER MOSFETS
AN-976A	UNDERSTANDING AND USING POWER MOSFET RELIABILITY DATA
AN-977	AN INTRODUCTION TO HEXFET QUALITY AND RELIABILITY
AN-978B	HI-SPEED,HI VOLTAGE IC DRIVER FOR HEX OR IGBT BRIDGE CIRCUIT-IR2110
AN-980	IGBT VS HEXFET POWER MOSFETs FOR VARIABLE
AN-983A	IGBT CHARACTERISTICS AND APPLICATIONS (COMPANION TO AN-990)
AN-984	PROTECTING IGBTs AGAINST SHORT CIRCUIT
AN-985B	IR2130:A SIX-OUTPUT,HIGH VOLTAGE MOS GATE DRIVER(IR2130,IR2131,IR2132)
AN-986	ESD TESTING OF MOS-GATED POWER TRANSISTORS (IR2110)
AN-987	UTILIZING SCHOTTKY RECTIFIER DIE IN ASSEMBLY
AN-988	INTRODUCTION TO 600V ADD-A-PAK & INT-A-PAK IGBT MODULES
AN-989	THE HEXFRED ULTRAFAST DIODE IN PRW SWITCHING CIRCUITS
AN-990	APPLICATION CHARACTERIZATION OF IGBT's (COMPANION TO AN-983)
AN-993	UTILIZING HEXFRED ULTRA-FAST RECOVERY DIODE DIE IN ASSEMBLY
AN-994A	MAXIMIZING EFFECTIVENESS OF YOUR SMD ASSEMBLIES,IR2110,IR2121,IR2125
AN-995A	ELECTRONIC BALLASTS USING THE COST-SAVING IR2155 DRIVER

DESIGN TIPS

DT 92-1B	SOLVING NOISE PROBLEMS IN HIGH POWER, HIGH FREQUENCY PIC DRIVEN POWER STAGES, IR2110
DT 92-2A	HIGH CURRENT BUFFER FOR MOS-GATE DRIVERS, IR2110
DT 92-3B	USING STD MOS GATE DRIVERS TO GENERATE NEGATIVE GATE BIAS FOR MOSFETS AND IGBT'S, IR2110
DT 92-4A	SIMPLE HIGH SIDE DRIVE PROVIDES FAST SWITCHING AND CONTINIOUS ON TIME IR2125
DT 92-5	SPICE MODELS FOR MOS-GATED POWER DEVICES
DT 92-6A	CURRENT SENSING WITH THE IR2130
DT 93-1	TESTING HIGH-POWER SCRs AND DIODES
DT 93-2	IR6000 DESIGN TIPS-DRIVING FILAMENTS, BRIDGE APPLICATIONS
DT 93-3	500V IGBTS REPLACE MOSFETS AT LOWER COST
DT 93-4	CURRENT CAPABILITY OF TO-220 PACKAGE
DT 93-6B	MINIATURIZATION OF THE POWER ELECTRONICS FOR MOTOR DRIVES
DT 94-1A	KEEPING THE BOOTSTRAP CAPACITOR CHARGED IN BUCK CONVERTERS, IR2125
DT 94-2	CHOOSING BETWEEN MULTIPLE DISCRETES AND HIGH CURRENT MODULES
DT 94-3A	SIMPLE ELECTRONIC BALLAST USING IR2155 MOS GATE DRIVER, IR2151,IR2152
DT 94-4	TRADE-OFF CONSIDERATIONS BETWEEN EFFICIENCY AND SHORT CIRCUIT CAPABILITY IN IGBTS
DT 94-5A	USING MOS-GATED POWER TRANSISTOR IN AC SWITCH APPLICATIONS
DT 94-6A	PARALLEL OPERATION OF IBGTs
DT 94-7A	LOW GATE CHARGE HEXFETS SIMPLIFY GATE DRIVE AND LOWER COST, IR2112
DT 94-8	REVERSE BATTERY PROTECTION WITH HEXFETs DOUBLES BATTERY LIFE
DT 94-9A	MAXIMIZING THE LATCH IMMUNITY OF THE IR2151 & IR2152 IN BALLAST APPLICATIONS, IR2151, IR2152
DT 94-10A	CHOOSING THE CORRECT DROPPING RESISTOR VALUE FOR THE IR2151/IR2152/ IR2155 MGDS
DT 94-11	3-PHASE BRIDGE DRIVE WITH OVERCURRENT PROTECTION, IR2130
DT 94-12	OPTICALLY ISOLATED GATE DRIVE CIRCUIT
DT 94-13	PUSH PULL DRIVE CIRCUIT
DT 94-14	ISOLATED SCR GATE DRIVE CIRCUIT
DT 94-15A	DESIGN CHECK LIST FOR IR21XX MGDs
DT 94-16	SYNCHRONOUS RECTIFIERS IMPROVE EFFICIENCY IN LOW OUTPUT VOLTAGE FORWARD CONVERTERS
DT 94-17	THERMAL RESISTANCE CHARACTERIZATION FOR NEW SURFACE MOUNT DEVICES
DT 95-1	REPLACING MECHNAICAL RELAYS WITH IR'S PTB412L MICROELECTRONIC RELAY IN FAX/MODEM DESIGNS
DT 95-2	IR'S NEW FIFTH GENERATION POWER MOSFETS: A REPLACEMENT GUIDE
DT 95-3A	ULTRA-COMPACT FLUORESCENT BALLASTS USING THE IR51XXX HYBRIDS, IR2151

RELIABILITY REPORTS

CUSTOM PRODUCTS RELIABILITY REPORT, #9, JANUARY 1990
HEXFET RELIABILITY REPORT, QUARTERLY REPORT #1, 1ST QUARTER 1983
HEXFET RELIABILITY REPORT, QUARTERLY REPORT #2, 2ND QUARTER 1983
HEXFET RELIABILITY REPORT, QUARTERLY REPORT #5, APRIL 15, 1984
HEXFET RELIABILITY REPORT, QUARTERLY REPORT #9, APRIL 15, 1985
HEXFET RELIABILITY REPORT, QUARTERLY REPORT #13, APRIL 15, 1986

RELIABILITY REPORTS, cont.

HEXFET RELIABILITY REPORT, QUARTERLY REPORT #14, JULY 15, 1986
HEXFET RELIABILITY REPORT, QUARTERLY REPORT #15, OCTOBER 15, 1986
HEXFET RELIABILITY REPORT, QUARTERLY REPORT #17, APRIL 15, 1987
HEXFET RELIABILITY REPORT, QUARTERLY REPORT #18, JULY 15, 1987
HEXFET RELIABILITY REPORT, QUARTERLY REPORT #19, OCTOBER 15, 1987
HEXFET RELIABILITY REPORT, QUARTERLY REPORT #20, JANUARY 15, 1988
HEXFET RELIABILITY REPORT, QUARTERLY REPORT #24, JANUARY 15, 1989
HEXFET RELIABILITY REPORT, QUARTERLY REPORT #26, JULY 15, 1990
HEXFET RELIABILITY REPORT, QUARTERLY REPORT #28, OCTOBER 15, 1990
HEXFET RELIABILITY REPORT, QUARTERLY REPORT #29, JANUARY 15, 1991
HEXFET RELIABILITY REPORT, QUARTERLY REPORT #30, APRIL 15, 1991
HEXFET RELIABILITY REPORT, QUARTERLY REPORT #31, JULY 15, 1992
HEXFET RELIABILITY REPORT, QUARTERLY REPORT #33, JANUARY 15, 1992
HEXFET RELIABILITY REPORT, QUARTERLY REPORT #34, APRIL 15, 1992
HEXFET RELIABILITY REPORT, QUARTERLY REPORT #35, JULY 15, 1992
HEXFET RELIABILITY REPORT, QUARTERLY REPORT #36, OCTOBER 15, 1992
HEXFET RELIABILITY REPORT, QUARTERLY REPORT #38, APRIL 15, 1993
HEXFET RELIABILITY REPORT, QUARTERLY REPORT, #39, JULY 15, 1993
HEXFET RELIABILITY REPORT, QUARTERLY REPORT, #40, OCT 15, 1993
HEXFET RELIABILITY REPORT, QUARTERLY REPORT, #41, JANUARY 5, 1994
HEXFET RELIABILITY REPORT, QUARTERLY REPORT, #42, APRIL 15, 1994
HEXFET RELIABILITY REPORT, QUARTERLY REPORT, #43, JULY 15, 1994
HEXFET RELIABILITY REPORT, QUARTERLY REPORT, #44, OCTOBER 15, 1994
HEXFET RELIABILITY REPORT, QUARTERLY REPORT, #45, JANUARY 15, 1995
HEXFET RELIABILITY REPORT, QUARTERLY REPORT, #46, APRIL 15, 1995
HEXFET RELIABILITY REPORT, QUARTERLY REPORT, #47, JULY 15, 1995
HEXFET RELIABILITY REPORT, QUARTERLY REPORT, #48, NOVEMBER 15, 1995
HEXFET RELIABILITY REPORT, QUARTERLY REPORT, #49, JANUARY 15, 1996
HEXFET RELIABILITY REPORT, QUARTERLY REPORT, #50, APRIL 15, 1996
HEXFET RELIABILITY REPORT, QUARTERLY REPORT, #51, JULY 15, 1996
HEXFET RELIABILITY REPORT, QUARTERLY REPORT, #52, OCTOBER 15, 1996
HEXFET RELIABILITY REPORT, QUARTERLY REPORT, NUMBER 2,
FEBRUARY 1995 (FOR IRGB PRODUCTS ONLY) E5049-2
HEXFET RELIABILITY REPORT, QUARTERLY REPORT, NUMBER 4
MARCH 1996 (FOR IRGB PRODUCTS ONLY) E5049-4
RELIABILITY REPORT - COPAK- IRGPC50UD2 - NOV 1993
HEXFRED-ULTRA FAST,SOFT RECOVERY DIODE RELIABILITY REPORT-JUNE, 1992
HEXPAK RELIABILITY REPORT - SEMI-ANNUAL, FIRST HALF, 1995
IGBT SIP MODULE RELIABILITY REPORT # SIP-01 JULY, 1993 3-PHASE BRIDGE FOR AC MOTOR CONTROLS AND UPS APPLICATIONS
IGBT SIP MODULE RELIABILITY REPORT # CPV-01 SEPTEMBER, 1993-REV. A 3-PHASE BRIDGE FOR AC MOTOR CONTROLS AND UPS APPLICATIONS
IGBT MODULE RELIABILITY REPORT #1 - NOVEMBER, 1991
COPAK- RELIABILITY REPORT-IRGPC50UD2, NOVEMBER 1993
GEN 4 IGBT/COPACK, DECEMBER 1996; ISSUE 2, TO220 & TO247,
FOR PRODUCTS MANUFACTURED AT IRGB
IR2110S RELIABILITY REPORT, POWER IC, REPORT NUMBER 3 - AUGUST 1990
IR2113 QUALIFICATION REPORT - AUGUST 1992
IR2151 QUALIFICATION REPORT, JULY 1994
MICROELECTRONIC POWER IC RELAY RELIABILITY REPORT REPORT NUMBER 13, JULY 1990
POWER IC RELIABILITY REPORT, NUMBER 5, APRIL 1992
POWER IC RELIABILITY REPORT, NUMBER 6, MARCH 1994
PVI1050 PHOTOVOLTAIC ISOLATOR RELIABILITY REPORT NUMBER 14, DECEMBER 1990
SCHOTTKY RELIABILITY REPORT, NUMBER 2, MARCH 31, 1992
SCHOTTKY RELIABILITY REPORT, SEMI-ANNUAL, FIRST HALF, 1993
SCHOTTKY RELIABILITY REPORT, SEMI-ANNUAL, SECOND HALF, 1993
SCHOTTKY DIODES RELIABILITY REPORT - FEBRUARY 1993 (FOR IRGB PRODUCTS ONLY)
ANNUAL SCHOTTKY RELIABILITY REPORT, 1994
SEMI-ANNUAL SCHOTTKY & HEXFRED RELIABILITY REPORT, FIRST HALF, 1995
SMD-220 RELIABILITY REPORT, (REPORT # SMT-03) OCTOBER, 1993
SO-8 RELIABILITY REPORT, JULY 1993-SURFACE MOUNT TECHNOLOGY (REPORT NUMBER SMT-01)
SO-8 RELIABILITY REPORT, MAY 1994-SURFACE MOUNT TECHNOLOGY (REPORT NUMBER SMT-01)
SO-8 RELIABILITY REPORT, JULY 14, 1995-SURFACE MOUNT TECHNOLOGY (REPORT NUMBER SMT-01)
SOT-223 RELIABILITY REPORT, (REPORT # SMT-02) MAY, 1994
SOT-223 RELIABILITY REPORT, (REPORT # SMT-02) OCTOBER, 1994
MICRO3 RELIABILITY REPORT (PRELIMINARY) (SMT-05) OCTOBER 20, 1995
MICRO3 & SO-8 RELIABILITY REPORT-PRELIMINARY(SMT-04)JUNE 30, 1995
IR2233J QUALIFICATION REPORT - JULY 1996

SELECTION GUIDES

IR POWER PRODUCTS REPLACEMENT GUIDE
CPPRG-1 CONSOLIDATED POWER PROD. REPLACEMENT GUIDE
WESTINGHOUSE-IR POWER PRODUCTS REPLACEMENT GUIDE
MOTOROLA-IR POWER PRODUCTS REPLACEMENT GUIDE
GE-IR POWER PRODUCTS REPLACEMENT GUIDE
SIEMENS-IR POWER PRODUCTS REPLACEMENT GUIDE
HEXFET CROSS REFEREENCE
DIODE DASH CROSS REFERENCE
GE/RCA TO IR HEXFET CROSS-REFERENCE 25/35 AMP THREE-PHASE
25/35 AMP THREE-PHASE BRIDGE CROSS REFERENCE GUIDE
SCHOTTKY CROSS REFERENCE
HIGH POWER MATRIX CROSS REFERENCE
DIODES & RECTIFIERS CROSS REFERENCE
PMCRF-2 - HIGH POWER MATRIX CROSS REFERENCE
E4007-STANDARD AND FAST RECOVERY DO-4/DO-5 DIODES CROSS REFERENCE
IR POWER PRODUCTS APPLICATION GUIDE

TECHNICAL PAPERS

ER90-1	HIGH VOLTAGE CHIPSET FOR OFFLINE SYSTEM DESIGNS
ER90-2	RISC SLUGFEST - IS MARKETING MUSCLE GETTING MORE IMPORTANT THAN CHIP PERFORMANCE?
ER90-3	NEW HIGH-VOLTAGE BRIDGE DRIVER SIMPLIFIES PWM INVERTER DESIGN
ER90-4	NEXT GENERATION HIGH PERFORMANCE CMOS/BIPOLAR/ DMOS H-SWITCH
ER91-1	"TRENDS IN INTEGRATED POWER AND LOGIC" (POWER INTEGRATED CIRCUITS)
ER91-2	POWER IC DRIVER PROTECTS MOSFETs AND IGTBs, OPERATES TO 500V
ER91-3	A 600V INTERFACE IC FOR THREE-PHASE BRIDGE CIRCUITS
ER92-1	"MGDS: HIGH PERFORMANCE INTEGRATED DRIVERS FOR POWER MOSFETs & IGBTs"
ITN-100	GENERATION II ADD-A-PAK MODULES
ITN-101	ADD-A-PAK QUALITY AND RELIABILITY
ITN-102	ADD-A-PAK MODULE MOUNTING INSTRUCTIONS
TP-92	PARALLELING OF POWER MOSFETs FOR HIGHER POWER OUTPUT
TPAP-1	ACCURATE JUNCTION TEMPERATURE CALCULATION OPTIMIZES IGBT SELECTION FOR MAXIMUM PREFORMANCE AND RELIABILITY
TPAP-2	GATE DRIVE CONSIDERATIONS FOR IGBT MODULES
TPAP-3	A DISCUSSION ON IGBT SHORT CIRCUIT BEHAVIOR AND FAULT PROTECTION SCHEMES
TPAP-4	IGBT FAULT CURRENT LIMITING CIRCUIT
TPAP-5	SNUBBER CONSIDERATIONS FOR IGBT APPLICATIONS
TPAP-6	SWITCHING VOLTAGE TRANSIENT PROTECTION SCHEMES FOR HIGH CURRENT IGBT MODULES
TPAP-7	AN ALGORITHM FOR THE SELECTION OF THE OPTIMUM POWER DEVICE FOR THE ELECTRIC VEHICLE PROPULSION
PMD-1-E3	THERMAL CONSIDERATIONS IN THE APPLICATION OF SILICON RECTIFIER & CONTROLLED RECTIFIER
PMD-1-E14	THRESHOLD VOLTAGE (VTO) AND SLOPE RESISTANCE (RT) FOR POWER DIODES AND TRYRISTORS
PMD-1-E17	RATINGS AND CHARACTERISTICS OF POWER MODULES
SMP-1-345	REVERSE BATTERY PROTECTION WITH HEXFETS DOUBLES BATTERY LIFE
SMP-1-347	SYNCHRONOUS RECTIFIERS IMPROVE EFFICIENCY IN LOW OUTPUT VOLTAGE FORWARD CONVERTERS
SMP-1-351	THERMAL RESISTANCE CHARACTERIZATION FOR NEW SURFACE MOUNT DEVICES
UPS-2-85	A SIMPLE TOOL FOR INTERACTIVE DESIGN OF INVERTERS
PAPER # 001	"OPTIMIZING NEW MOSFET TECHNOLOGY FOR SPECIFIC APPLICATIONS"
PAPER # 002	"NEXT GENERATION POWER SEMICONDUCTORS FOR WIRELESS SYSTEMS"
PAPER # 003	"DESIGN & IMPLEMENTATION OF COMPACT, PLUG & PLAY POWER AND DRIVE" AND DRIVE SOLUTION FOR AC INDUCTION MOTORS"
PAPER # 004	"ACCURATELY COMPARING THE IN-APPLICATION PERFORMANCE OF IGBTs"